DOCUMENT RESUME

ED 266 868		PS 015 670

AUTHOR	Anderson, Elizabeth Toof
TITLE	The Perceived Effect of the Child Development Associate Credential on Recipients in Illinois.
PUB DATE	Dec 83
NOTE	146p.; Ed.D. Thesis, Southern Illinois University at Edwardsville.
PUB TYPE	Reports - Research/Technical (143) -- Dissertations/Theses - Doctoral Dissertations (041)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Certification; *Child Caregivers; *Competency Based Teacher Education; Early Childhood Education; Educational Attainment; Geographic Location; Job Satisfaction; Literature Reviews; *Outcomes of Education; Postsecondary Education; *Preschool Teachers; Questionnaires; State Surveys; Work Environment
IDENTIFIERS	CDA; *CDA Credential; Child Development Associate; *Illinois

ABSTRACT

This study tested hypotheses concerning perceived and real consequences of certification for individuals who earned a Child Development Associate (CDA) credential in Illinois. Primary hypotheses were that the majority of CDAs would indicate that earning the CDA credential had made a positive difference to them, made their job better, and increased their salary. Also assessed were the propositions that the impact of certification on the recipient would differ according to the recipient's level of educational achievement at the time the credential was earned and according to the population density of the area in which the CDA was employed. Data were collected using a questionnaire specifically designed for the study. Participants were 184 out of 374 CDA recipients in Illinois (49%). Results are discussed and the questionnaire is appended, along with comments made by respondents. (RH)

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THE PERCEIVED EFFECT OF THE
CHILD DEVELOPMENT ASSOCIATE CREDENTIAL
ON RECIPIENTS IN ILLINOIS

BY

ELIZABETH TOOF ANDERSON

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

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The Graduate School
Southern Illinois University at Edwardsville
Edwardsville, Illinois

December 1983

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

Graduate School

Date December 1, 1983

WE HEREBY RECOMMEND THAT THE DISSERTATION SUBMITTED

BY Elizabeth Toof Anderson

ENTITLED The Perceived Effect of the Child Development Associate Credential On Recipients in Illinois

BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF Doctor of Education

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We certify that, for this paper, all research involving human subjects complies with the Policies and Procedures for Research Involving Human Subjects, Southern Illinois University at Edwardsville, Edwardsville, Illinois.

ACKNOWLEDGEMENTS

The cooperation and support of many people have contributed to the completion of this study. Appreciation is extended to Dr. Robert E. Rockwell for the advice and counsel that he offered, while generously sharing his time throughout this study. Gratitude for editorial and research advice is given to Dr. Thomas M. Shea and Dr. Donald J. Baden. Dr. Robert E. Mason offered encouragement during the early stages of doctoral study which established the base of this study. The cooperation of the above mentioned faculty members contributed greatly to the progress and development of this study.

Encouragement and patience coupled with a generous sharing of computer expertise were given by my husband, Tom. Thankful recognition of the help given by all those concerned with this study is gratefully appreciated.

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CHAPTER ONE

Introduction

The Child Development Associate program is currently the primary effort directed toward providing appropriate training and certification for the teaching of young children (Stipek, Valentine, and Zigler, 1979). This study was concerned with the perceived impact of the Child Development Associate Credential on the careers of childcare staff. The investigation involved residents of Illinois who have received the Child Development Associate (CDA) Credential. Studies had not previously been undertaken to determine recognition of the certificate.

Changes are occurring in school-age populations and enrollment levels in the United States. The media regularly report that schools are closing and teaching positions are being eliminated. However, a different situation exists in programs where the children are three-to-five years old. Even though there has been a decrease of eighteen percent in the number of children in this age group, in the 1970-1980 decade, school enrollments for this age have increased (Statistical Abstract of the United States, 1981). In 1970 thirty five percent of the three-to-five year olds were attending school. By 1980 this number had risen to fifty two percent. Although the three-to-five year old population has decreased during the past decade their enrollments in early childhood programs have increased.

There are two basic reasons for the rise in early childhood enrollments. The first of these is the changing American family (Peters, 1982). Family changes include maternal employment, a decrease of family size, the geographical scattering of the extended family, a rising divorce rate, and an increase in the number of single mothers. The second reason for the rise in enrollments is a growing parental interest in academic achievement. Many parents seek preschools or centers that provide cognitive stimulation for their young children. The increase in school enrollments made it clear that more early childhood teachers were needed (Jones, Hamby, and Hardy, 1980). Included in this chapter is a review of the requirements for earning a Child Development Associate Credential.

History of the Child Development Associate Credential

A meeting of early childhood educators and child development specialists was convened in 1971 by the United States Office of Child Development and the Child Development Consortium was formed. From 1972 to 1975 the Consortium members developed the competencies, assessment criteria, and the credential award system required for an individual to become a certified Child Development Associate (CDA).

The Child Development Associate is a person trained and qualified to meet the specific needs of children in a child development setting by nurturing the children's physical, social, emotional, and intellectual growth, by establishing and maintaining a proper childcare environment and by promoting good relations between parents and staff (CDAC, 1982). Each CDA candidate is evaluated on demonstrated ability to work with preschool children. The evaluation of candidates is based on the CDA's competencies in the six areas referred to above and thirteen functional areas. These competencies are listed in Table 1-1.

The CDA concept has evolved over time (Zigler, 1981, CDAC, 1982, Klein, 1980). In 1980 the Consortium was dissolved and the Bank Street College of Education agreed to continue the process of credentialing CDAs. In November 1982, a grant from the federal Office of Human Development Services to Bank Street College was renewed for three years. This grant included funds for assessing and credentialing CDA candidates, coordinating activities with Head Start Training and Technical Assistance Providers, and establishing a diverse and stable funding base. It is anticipated that incremental financial self sufficiency during this three year period will lead to complete financial independence before the Office of Human Development Services ceases funding the CDA program in November of 1985. This is to be accomplished by working with the CDA Credentialing Commission to institutionalize the CDA. Over 12,000 CDA Credentials have been awarded

Table 1-1

CDA Competencies and Functional Areas

Competencies	Functional Areas
1. Establishes and maintains a safe and healthy learning environment.	1. SAFE-Candidate provides a safe environment by taking necessary measures to reduce or prevent accidents.
	2. HEALTHY-Candidate provides an environment that is free of factors which may contribute to or cause illness.
	3. ENVIRONMENT-Candidate selects materials and equipment and arranges the room to provide an environment conducive to learning and appropriate to the developmental level of the children.
2. Advances physical and intellectual competence.	4. PHYSICAL-Candidate provides a variety of appropriate equipment, activities and opportunities to promote the physical development of the children.
	5. COGNITIVE-Candidate provides activities and experiences which encourage questioning, probing, and problem solving skills appropriate to the developmental level of each child.

Table 1-1 (continued)

Competencies	Functional Areas
	6. LANGUAGE-Candidate helps children acquire and use language as a means of communicating their thoughts and feelings and understanding others.
	7. CREATIVE-Candidate provides a variety of experiences and media that stimulates children to explore and express their creative abilities.
3. Builds positive self concept and individual strength.	8. SELF-CONCEPT-Candidate helps each child know, accept and appreciate herself/himself as an individual.
	9. INDIVIDUAL STRENGTH-Candidate helps each child develop a sense of independence and acquire ability to express, understand and control her/his feelings.
4. Promotes positive functioning of children and adults in a group.	10. SOCIAL-Candidate helps children learn to get along with others and encourages feelings of mutual respect among the children in the group.
	11. GROUP MANAGEMENT-Candidate provides a positive routine and establishes simple rules with the group that are understood and accepted by children and adults.

Table 1-1 (concluded)

Competencies	Functional Areas
5. Brings about optimal coordination of home and center child rearing practices and expectations.	12. HOME-CENTER-Candidate establishes positive and productive relationships with parents and encourages them to participate in the center's activities.
6. Carries out supplementary responsibilities related to children's programs.	13. STAFF-Candidate works cooperatively with other staff members concerning plans, activities, policies and rules of the center.

Pettygrove, 1980

nationwide. The CDA National Credentialing Program (1983) announced that nearly half of the 12,000 CDA Credentials awarded since 1975 were earned in the last three years. A goal of 4,000 assessments annually by 1985 has been set.

Twenty-six states and the District of Columbia have already incorporated the CDA Credential into their childcare regulations. Ten additional states have included the CDA Credential in draft revisions of their existing childcare credential requirements (Federal Register, 47, 163 August 23, 1982, p. 36699).

The states that recognize the CDA in State Regulations are the following:

Arizona
Arkansas
California
Hawaii
Illinois
Kansas
Maryland
Michigan
Minnesota
Missouri
Nevada
New Mexico
New Jersey
New York
Nebraska
North Carolina
North Dakota
Oklahoma
Oregon
Pennsylvania
South Dakota
Texas
Utah
Virginia
Washington
West Virginia

and the District of Columbia

An analysis of the CDA credentialing procedure shows that it is a comprehensive team assessment (Kardon, 1982). A person who has been officially registered as a candidate for the CDA Credential by the organization responsible for the CDA Credential Award System is identified as a CDA candidate (U.S. Human Development Services, 1981). Observations of the CDA candidate's classroom performance are evaluated by a combination of people. The process required of an individual who wants to become a CDA is discussed below.

CDA Credential Award System

The four steps in the CDA Credential Award System are as follows:

1. Application
2. Information Collection
3. Local Assessment Team Meeting
4. Credential Award

Application. A CDA candidate must meet the following criteria:

1. Be 16 years old.
2. Identify a state-approved child development center where he or she can be observed by other members of the team while working as a primary caregiver with a group of at least eight children, the majority of whom must be three through five years old.
3. Have had either some formal training (for example,

in a university, college, junior college, vocational/technical school or high school) or some informal training (for example, workshops, seminars or inservice training) in early childhood education or child development. In total, a candidate must have had at least three training experiences. Each workshop or course equals one training experience.

4. Have had at least 600 hours of experience during the last five years with children ages three-to-five in a group setting; and
5. Be able to speak, read and write well enough to be understood by others.

In addition to these minimum requirements, in order to be eligible to apply for a Bilingual/Bicultural CDA Credential, there are two additional requirements. These are:

6. Speak, read, and write well enough in both English and Spanish to understand and be understood by others; and
7. Be assessed in a center where both languages and both cultures are consistently used in all activities.

CDAC (1982)

To become a candidate, a person meeting the eligibility requirements above registers with the CDA National Credentialing Program by completing the application forms and paying an application fee. After registering, the candidate who is sometimes called an intern or a trainee:

1. Explains to the director of the center where the candidate is employed that observations will be required of the candidate at work.
2. Selects the members for the Local Assessment Team. These include the Advisor, and the Parent/ Community Representative, and the CDA candidate.
3. Creates a document called a portfolio. The portfolio, often a notebook, must contain evidence of competence in each of the thirteen Functional Areas of the CDA Competency Standards.

Information Collection. It is necessary that the portfolio the candidate prepares fulfill a set of minimum standards as follows:

1. The portfolio must contain a brief autobiographical sketch. The sketch should not exceed 300 words and must include some discussion of why the individual chose to work with children.
2. The portfolio must include at least one section for each of the thirteen functional areas. Each section must contain at least three entries.
3. For every entry the candidate must indicate in writing how the entry relates to being competent in

that particular functional area.

The Local Assessment Team includes the advisor and the parent/community representative. The advisor is a professional in the field of early childhood education. Comparable terms for field advisor are field supervisor or instructor. The field supervisor teaches, advises, counsels, guides and instructs and assists CDA interns in their field work during the training period. Observations of the candidate and suggestions of materials for the portfolio are given by the advisor. The parent/community representative is a parent who distributes and collects questionnaires from the parents of the children in the candidate's room. The parent/community representative also observes the candidate at work with children in the classroom.

Local Assessment Team Meeting. After the candidate, the advisor and the parent/community representative have collected the needed information, a readiness notification form is submitted by them to the CDA National Credentialing Program with the necessary fee. This notifies the national office that the candidate is ready for the local assessment team meeting. When the CDA national credentialing program receives the readiness form it assigns a fourth member to the individual's local assessment team (LAT). This person is an expert in early childhood education who has been trained to work on CDA assessments. This member of the team is called the CDA representative. The CDA representative contacts the other three LAT members and the candidate's center director to establish a time for the LAT meeting. The early childhood center director is not part of the LAT, but is kept fully informed of team activities. Before the LAT meeting the CDA representative observes the candidate working with children for about three hours. There is also an interview with the candidate which lasts about an hour (Perez-Jones, 1980).

Following the interview, the members of the LAT - the candidate, the advisor, the parent/community representative and the CDA representative - hold the LAT meeting. Each member of the team shares the information that has been collected. All four members of the LAT have an equal voice at the meeting and are expected to participate. At this meeting the LAT decides to recommend either that the CDA credential be awarded or that more training is necessary. The vote must be unanimous for the credential to be recommended.

Credential Award. After the materials have been received by the CDA National Credentialing Program the recommendations made by the LAT are followed. If the advice is that the CDA Credential should be awarded this is done. However, if more training is needed, a letter is sent to the candidate stating this. Once the CDA credential is awarded, it is valid for three years. At the end of that period it can be renewed for an additional three years with the payment of a fee.

Expansion of CDA

In 1978, the CDA Bilingual/Bicultural assessment system was begun. This was a response to the needs of staff working in multicultural settings. Persons who work in centers where both English and Spanish are consistently used can now apply for the Bilingual/Bicultural CDA Credential.

The Home Visitor CDA Credential is expected to be available by the Spring of 1984. This follows a request made on June 23, 1983, by the federal Office of Human Development Services that the CDA National Credentialing Program develop assessment materials for a Home Visitor CDA Credential. In preparation for the new credential, workshops that focus on designing and implementing Home Visitor CDA training programs are being conducted at state conferences for childcare personnel.

Long range goals for CDA include the establishment of a diverse and stable funding base, increased acceptance and recognition for the CDA Credential, growth in the number of persons assessed each year, improvement in the quality of the assessment process and expansion of the program to include a new population of caregivers (CDANC, 1983). In addition to developing the skills of persons working as home visitors, there are plans to develop credentials for all adults who care for young children. This includes those who work in family day care homes, and those who work with infants and toddlers or children with special needs. Developmental work to expand the process to other caregivers had begun in 1980 but was halted in 1982 due to a lack of funds (CDANC, 1983).

Changes in CDA

The CDA National Credentialing Commission recently made a series of policy decisions to change the CDA Competencies and the assessment process. The structure of six Competencies and thirteen Functional Areas remains. However, the definitions of some of the Competencies have been changed and several Functional Areas have been renamed. Current candidates have until October 31, 1984, to complete assessment using the current Competencies. The eligibility requirements are also being strengthened. The minimum age is being raised from 16 to 18. The CDA Credential is being included for the first time in the qualifications as an option for Advisor and CDA Representative. Portfolio additions include having the candidate give a description of the program, noting its goals and philosophy, give the ages of the children and the size of the group with whom the candidate works. Renewal is being upgraded. CDAs will submit a report analyzing their recent work in the Functional Areas and a Renewal Committee from the local community will review the report to help assess growth. It is planned that credentials which were renewed for three years at a cost of $10.00 will be renewed for five years at a cost of $50. Before November 1, 1983, candidate fees were $125.00. They have been raised to $250.00. The new fee level is necessary to offset the field costs of assessments as federal funding for the program decreases. Fees are collected in three stages. These are the following: application fee, assessment fee (sent with Readiness Notification Form), and credentialing fee (paid upon successful assessment). Under the new fee schedule, the application fee remains at $25.00. The assessment fee was raised from $50.00 to $100.00 and the credentialing fee was increased from $50.00 to $125.00.

A major fundraising effort aimed at the private sector is being planned (CDANCP, 1983). The transition plan to move the program from almost complete federal funding to more diverse funding sources includes increased use of the media and promotion of community sponsored events. These are in line with a national strategy to gain greater recognition and acceptance for the CDA Credential. Granger (1983) mentioned that a stable funding base needs widespread participation. He suggested initiating a scholarship fund for CDAs, informing elected representatives at every level of government, and soliciting foundation and corporate support. He urged active professional committment to the support of the credential.

Purpose of the Study

It is generally thought that CDA certification has an impact, not only on the children, but on those who earn the credential. The Child Development Associate (CDA) Credential is an innovation which has generated much interest and discussion. However, little research has been concerned with CDA (Pettygrove, 1980). Granger and Gleason (1981) cited the need for information concerning the impact of the credential award. An attempt has been made to formally establish the consequences of the CDA Credential.

The dearth of research concerning the CDA has been cited by Zigler and Kagan (1981). They suggested an inquiry into the short and long term effects of the credential. Research has not evaluated what the CDA Credential has meant to the individuals who have received it. The literature does not review changes which have occurred in professional development for those who have earned the CDA Credential.

The need to document the effect of the CDA Credential is underscored by practical aspects. The CDA program is seeking greater recognition and professional acceptance since the federal government plans to cease financial support of CDA. In the Federal Register of August 23, 1982, it was stated that "economic self-sufficiency for the CDA credentialing system, independent of Federal funding, is anticipated by the end of fiscal year 1985". The purpose of this study is to ascertain the perceived effects of the CDA Credential and to examine the impact of the credential upon the professional careers of the recipients.

Hypotheses

A series of hypotheses were formulated that relate to the perceived, and real, consequences of earning a CDA Credential in Illinois. The validity of these hypotheses were examined through the analysis of the responses to a comprehensive questionnaire distributed to all the CDAs. The primary hypotheses are enumerated below:

1. The majority of CDAs perceive that earning the CDA Credential has made a positive difference to them.
2. The majority of CDAs perceive that, as a result of earning the CDA Credential, their job is better.
3. The majority of CDAs perceive that, as a result of earning the CDA Credential, their salary is better.
4. The consequences of earning the CDA Credential in Illinois depend upon the educational achievement at the time the credential was earned.
5. The consequences of earning the CDA Credential in Illinois depend upon the population density of the area in which the CDA is professionally employed.

Definition of Terms

Some definitions are given to facilitate understanding of the terms used in this study. The position definitions are taken from a study of childcare workers which was conducted by the Child Day Care Association of St. Louis (1981).

Positions

Program/Center Director: The person directly responsible for the operation of the day care program within the center.

Supervisor/Coordinator: The person classified by the agency as Day Care Supervisor, Supervising Teacher or Head Teacher.

Teacher: The person in charge of a classroom within an agency. This includes those classified by the agency as Teacher or Day Care Worker.

Assistant Teacher/Aide: The person who assists the person in charge of a classroom within an agency. This includes those persons classified by the agency as Assistant Teacher, Day Care Assistant or Day Care Aide.

Programs

Head Start: Head Start is a half day program which is essentially for four year olds. It serves economically disadvantaged children prior to regular public school programs.

Day Care Center: Center where the care of young children is available for a period of usually twelve hours a day. It is designed to be in operation during the hours parents who are employed or absent from the home for extended periods of time would require care for their children.

Nursery School: A pre-kindergarten school, usually for children between the ages of three and five years old. Often the emphasis is on social experiences for young children to interact with children their own age.

Kindergarten: Program for five year olds maintained by community schools with varying emphasis on socialization and preparation for first grade.

This study was intended to discover, through the use of the Child Development Associate Questionnaire, whether the CDAs in Illinois perceive that the Child Development Associate Credential has made a difference in their professional lives. Analyses of the data allowed the hypotheses to be tested.

CHAPTER TWO

Review of Related Literature

This section reviews the literature concerned with studies of the Child Development Associate (CDA) certification development and childcare staff. The first section describes the establishment of the criteria for the competencies and assessments required for the CDA Credential. The second section reviews the theory of performance based teacher education. The CDA Program evolved from this alternative to traditional schooling. The third section reports studies on childcare staff.

Establishment of the Criteria for Competencies and Assessment

In 1971, at the conference of the National Association for the Education of Young Children (NAEYC), an outline of the commitment that the United States Administration for Children, Youth and Families had made was presented. This commitment was to develop a credential that would increase the quality and the numbers of early childhood caregivers (Zigler, 1971). Prior to this plan, staff qualifications for day care center and nursery school personnel were usually not specified. Only health and safety standards were required for a center to be licensed.

Following the NAEYC conference leaders in the field of early childhood education and child development convened in Washington, D.C. They developed plans to establish a new professional credential, the CDA certificate. The planning committee was composed of delegates from three early childhood professional organizations (Klein, 1980). Represented were the American Association of Elementary, Kindergarten and Nursery Educators, the Association of Childhood Education and the National Association for the Education of Young Children, (CDAC,1976). The names of the individuals who attended this meeting are listed in Table 2-1. They established the Child Development Associate (CDA) Consortium. This was a private, nonprofit corporation whose major task was to develop an assessment and credentialing system for the childcare professional, the Child Development Associate. The CDA Consortium was funded by the Administration for Children, Youth and Families. Thirty eight national associations and organizations interested in children and their welfare joined the original planning group to become members of the Consortium (Mattingly, 1982). The membership of the Consortium is also listed in Table 2-1. The Consortium's members were grouped into nine separate categories, according to their particular orientation and interests. The divisions are:

Category A - includes organizations whose primary focus was child development or education of children.

Table 2-1

Child Development Associate Consortium Original Membership

Original Incorporators - June 1972

- Dr. Rebecca Baker, Association of Childhood Education
- Dr. D. Dwain Hearn, American Association of Elementary, Kindergarten, and Nursery Educators
- Dr. Chester Pierce, Public Representative
- Dr. Marilyn Smith, National Association for the Education of Young Children

June 1973 Membership

Category A

- American Association of Elementary, Kindergarten, and Nursery Educators
- Association for Childhood Education International
- National Association for the Education of Young Children

Category B

- Dr. Chester Pierce, Public Representative
- Dr. Samuel Sava, Public Representative

Category C

- Black Child Development Institute
- National Education Task Force de la Raza
- National Indian Education Advisory Council
- National Urban League, Inc.
- Puerto Rican Association for Community Affairs, Inc.

Category D

- American Association of Colleges for Teacher Education
- Association of Teacher Educators

Category E

- National Association of State Directors of Teacher Education and Certification

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Table 2-1 (concluded)

Category F

- OCD Funded Training Programs
- Education Commission of the States
- 4-H-Youth, Extension Service, USDA
- National Foundation for the Improvement of Education

Category G

- American Academy of Child Psychiatry
- American Association for Health, Physical Education and Recreation
- American Orthopsychiatric Association
- American Personnel and Guidance Association
- American Psychological Association
- American Speech and Hearing Association
- Center for Applied Linguistics
- National Association of Social Workers

Category H

- American Library Association-Children's Services Division
- American Montessori Society
- Day Care and Child Development Council of America, Inc.
- National Committee on the Education of Migrant Children
- National Federation of Settlements and Neighborhood Centers
- National Head Start Advisory Council

Category I

- National Parents Federation for Day Care and Child Development

Child Development Associate
Consortium, 1976

Category B - includes two individuals who were appointed, because of their stature, to represent the public.

Category C - includes organizations representing ethnic-minority populations.

Category D - includes organizations concerned with training and improvement of teacher education.

Category E - includes organizations involved in accreditation and certification.

Category F - includes organizations appointed for their expressed interest and potential contribution to the work of the Consortium.

Category G - includes organizations whose main focus was a specialized field, a part of which focused on child development and/or early childhood education.

Category H - includes organizations involved in some aspect of child development or early childhood education.

Category I - includes organizations whose primary purpose involves the concerns of parents regarding the development and education of children.

The categories listed above represent the comprehensive intent of the original Consortium. By including educational associations, organizations which represent ethnic/minority populations and those involved in accreditation and certification there was an obvious breadth in the founding membership.

The CDA Consortium commissioned contractors and subcontractors to carry out much of the research that would be the foundation for the Credential Award System (CDAC, 1976). Researchers, pilot projects, Head Start Supplementary Training (HSST) programs, task forces and conferences were coordinated to design the performance based assessment system and the method for awarding the CDA Credential. Between 1972 and 1975 forty four subcontracts refined the competencies (CDAC, 1976). They developed assessment and credentialing procedures and assisted the Consortium in meeting organizational needs.

Pilot Training Programs. The first major training effort to help individuals become competent in the areas that the Consortium had defined necessary for the credential took place in 1973. Thirteen CDA pilot training projects were funded (Jones, Hamby, and Hardy, 1978). The geographical and regional characteristics, the program approach, and the sponsors of the pilot programs reflected the variety that was necessary in a national program. Table 2-2 lists the locations and methods used in these pilot studies. The thirteen projects occupied a focal

Table 2-2

Program Approaches and Other Variables Among 13 Pilot Projects

Pilots	Geographical/ Regional Characteristics	Program Approach	Sponsor(s)/ Number () to be Trained
Allen University, Columbia, SC	Urban/Southeast, Region IV	Prioritized training; levels of competence; skill development	Four year university (30)
Bemidji State University Bemidji, MN	Rural/North Central Region V	Personalized one-to-one training; bicultural	Four year college (30)
California State College California, PA	Urban,rural/ Northeast Region III	Training of trainers; individualized problem-solving	Four year college & Head Start Training Office (10)
Community College of Denver Denver, CO	Urban, suburban Midwest Region VIII	Center teams; cluster concept; multi-field placements	Community college (50)
Erikson Institute for Early Education Chicago, IL	Rural/cross Regions Indian and Migrant Division	Training of trainers for American Indian Programs	Office of Indian Child Services, Erikson Institute (24)

Table 2-2 (continued)

Pilots	Geographical/ Regional Characteristics	Program Approach	Sponsor(s)/ Number () to be Trained
Fall River Citizens for Citizens, Inc. Fall River, MA	Urban,suburban/ Northeast Region I	Teachers as trainers; module-course combination	Head Start Project; public schools, Model Cities Agency, mental health assoc, & community college (50)
Honolulu Community College University of Hawaii at Manoa Honolulu, HA	Urban, rural/ West Region IX	Multi-ethnic on-site mini-trainers; module development	Community college & 4 year university (10)
Idaho Consortium Boise, ID	Rural, urban/ Northwest Region X	Diagnostic appraisals; self-selected study; team training	Four year state college, 4 year university, state agencies, public schools (50)
Eastern Oklahoma State College & Oscar Rose Jr. College Wilburton, OK	Southwest Region VI	Mini-courses with field-component units of instruction	Four year college (50)

Table 2-2 (concluded)

Pilots	Geographical/ Regional Characteristics	Program Approach	Sponsor(s)/ Number () to be Trained
Community College of Philadelphia, School District of Philadelphia & Research for Better Schools Philadelphia, PA	Urban/Northwest Region III	Module development; use of resource instructors/ facilitators	Community college, public school system, research & development laboratory (25)
St. Louis Community College at Forest Park St. Louis, MO	Urban, suburban/ Midwest Region VII	Trainer as model; student support group; module development	Community college, educational confederation, child day care association (60)
Teachers, Inc. New York, NY	Urban/Northeast Region II	Development of teaching units	Four year college & training organization (50)
University of New Mexico Albuquerque, NM	Rural, urban/ Southwest Region VI	Bilingual/ bicultural; block teaching; use of clinical assistants	Four year university (30)

Jones, Hamby and Hardy, 1978

point in the development of the CDA credentialing effort. The pilot programs developed new approaches to training (Granger and Sarver, 1980). These were based on the CDA Training Criteria which had been established by the Administration for Children, Youth and Families. The training guidelines required that pilot projects provide for the following:

1. Training based on the CDA Competencies.
2. Integration of academic content and field experiences.
3. Supervised field experiences that occupied at least 50 percent of the total training time.
4. Individualization of training based on initial and ongoing appraisals of competence.
5. Flexibility in length of training time.

Jones, Hamby & Hardy (1978)

Head Start Supplemental Training/Child Development Associate. A second major training effort started in 1973 with the incorporation of CDA training into Head Start Supplementary Training (HSST) programs for Head Start classroom staff. Trickett (1979) reported that the original Head Start hiring policy suggested that two-thirds of the staff should be nonprofessionals who lived in the poverty area served by Head Start. Improved employment potential as well as better qualified personnel were the aims in 1968 when Head Start implemented a career development policy for its staff. This career development program included a plan for long term training and education for each Head Start staff member. The classroom nonprofessionals, the parents of children in the Head Start program who helped in the classroom, were included in this career development plan. Value was placed on providing the poor with more options than low level jobs with no opportunity for advancement. The mandate for career development in Head Start was implemented through the Head Start Supplementary Training Program (HSST). HSST provides college training to Head Start staff. These college courses could lead to an Associate degree or a Bachelor's degree. This additional education allowed other employment possibilities to become a reality. Beginning in 1973 CDA training became a component of all HSST programs.

Gilman and Signatur (1978) reported on case studies of eight HSST/CDA training programs. This two-phased research effort was designed to examine the effectiveness of the HSST/CDA program.

Phase one was a national survey of all HSST/CDA programs. It attempted to investigate the following:

1. The training institutions which were providing CDA training.
2. The different approaches being used by CDA training institutions.
3. The characteristics of these institutions and their personnel.

4. The effect of this training on the people and institutions responsible for the training.

Phase two was a national study of selected HSST/CDA trainers and institutions which investigated the relationship between participation in a HSST/CDA training program and effective performance in the CDA Credential Award System. Gilman and Signatur (1978) reported that visits were made to eight HSST/CDA sites. Case studies were developed from these HSST/CDA training programs. Consideration in the selection of sites was given to programs which represented different training methods, different funding mechanisms and geographically dispersed sites. The HSST/CDA training programs selected for this study fall into the following four general groups.

1. Head Start grantees who conducted their own CDA training.
2. Head Start grantees who conducted CDA training cooperation with an educational institution.
3. Educational institutions which provided CDA training under subcontracts from Head Start grantees.
4. Educational institutions which provided CDA training for Head Start staff under contracts from regional ACYF offices.

In reviewing the effects that HSST/CDA training has had on Head Start staff Trickett (1979) stated that it was very difficult to ascertain how many staff members had received degrees as a result of the program. Another factor difficult to determine was what far reaching effects were a result of this career development plan and the training associated with it. The training of community people to be competent Head Start teachers resulted in changes in other aspects of the teachers' lives. The other areas that were affected include the teacher's own children as well as other adults including the parents of the children they taught and their co-workers. Head Start personnel were able to move up the career ladder within the Head Start organization as well as in other childcare centers where their education and the experience which they received as a Head Start teacher allowed an advancement in the profession.

Field Tests. Field tests were held to examine the practicality of the CDA Credential Award System. In 1974, 188 candidates and the other members of their Local Assessment Team participated in one of the field tests (CDAC,1976). They completed questionnaires and kept records of all the assessment activities. This was done to determine the feasibility of employing particular assessment models under actual conditions. A year later another field test was conducted. This 1975 test included 91 candidates who evaluated the Consortium's assessment system. This was completed prior to full implementation of the Credential Award System.

In 1975 the first CDA credential was awarded (Jones, Hamby, and Hardy, 1981). The decision to initiate the CDA Credential Award System signaled the end of the developmental stage of the program and the beginning of the operational stage (Klein, 1980). In continuing recognition of growing needs, in 1975 the Administration for Children, Youth and Families (ACYF) provided the impetus for the creation of training methods, materials and curricula specifically for staffs working with Spanish-speaking children. This was accomplished by funding five bilingual/bicultural CDA pilot training projects.

In 1976 the ACYF focused on ten states to encourage incorporating the CDA Credential into state childcare regulations. In addition, an evaluation of the CDA Consortium Credential Award System's first year of operation was conducted to determine how effective the system was in operation and to identify areas which needed revision. Data gathering instruments, including a questionnaire, were added to the forms that each team member completed during assessment. Information concerning meetings, observations and reports was given. One of the recommendations from this evaluation was that a majority of the CDAs believed that academic credit should be awarded for the credential. It was subsequently judged to be worth eighteen credits, (CDAC, 1976). Other advice included continuing to operate the Child Development Associate Credential as it was in 1975-76, monitoring application files, and increasing the number of items to be rated by the LAT members for each functional area.

Theory of Performance Based Education

The second section of this review of related literature presents the theory of the foundation of performance based teacher education. CDA is a performance, or competency based credential. Performance based teacher education focuses on the acquisition of specified competencies (Elam, 1971). Teaching competencies are explained as teaching acts which are observable performances (McDonald, 1974). Houston and Hawsam (1972) noted that competency based instruction requires the following two characteristics:

1. Precise learning objectives which are known to the learner and the teacher alike.
2. Accountability in which the learner knows he is to demonstrate the specified competencies at a required level.

An additional feature of competency based education is that the emphasis is on exit rather than entrance requirements. There are five types of learning objectives in competency based teacher education programs. The foundation for each of these objectives and examples are given below:

Base of Objective	Demonstration
1. Cognitive base	Learner demonstrates

	specific knowledge and intellectual abilities.
2. Performance base	Learner demonstrates ability in observable action.
3. Consequence base	Learner produces a change in others.
4. Affective base	Concerns learner's attitudes, values, beliefs and relationships.
5. Exploratory base	Requires learner to experience a specified activity, but no attempt is made to specify resulting changes.

(Houston and Hawsam, 1972)

Maxwell (1974) identified three logical sequential steps in a performance based program. First the competencies or abilities are identified. Next, the assessment devices are developed to ascertain what is the degree of competency. The third step designs a program to produce these competencies. Rosner and Kay (1974) stated that one highly desirable and almost immediate outcome of a performance based program is that teacher education students express satisfaction with such a program. They feel that they have experienced the realities of the classroom.

Other effects of performance based teacher education have been summarized by Harris (1982). He gave the following descriptions of performance based teacher education: clarifier of educational purposes; bridge between theory and practice through field based experience; and humanizer of educational process through learning experiences of the student's choice.

Peterson and Stakenas (1981) noted that two important shifts in educational emphasis may be underlined as legacies of the competency based movement. The first is an ideological conversion from concentration on processes or means to the consideration of outcomes or ends. In the competency based approach content is viewed as a means of attaining required competencies or ends. Attention is given not only to what should be taught but how students are to learn and apply what they have learned. The second major shift in emphasis has been in the roles of participation in the educational process. Teacher educators spend less time lecturing. Their role changes to that of advisor and evaluator. Personal responsibility for learning is fostered among the students.

In addition to the above objectives further differences between competency based education and traditional education were related by Hill and Jones

(1976). Competency based teacher education is self-paced, thus it can employ modules. These modules allow individual and independent scheduling of goal attainment. Therefore, the role of instructor changes to that of a guide. Houston and Hawsam (1972) further discussed differences in performance based teacher education. Included were the fact that the teacher's portfolio of credentials does not indicate grades associated with general courses or letters of reference. Instead it has a listing of competencies which have been demonstrated as well as certification that criteria have been met. All of the above, including self-paced instruction, performance of competencies that meet criteria, and emphasis on exit professional behavior, describe the training and assessment that are part of the CDA program (Beatty, 1980).

Studies of Childcare Staff

Few studies have examined CDAs or their careers. Little research has been conducted to establish exactly who childcare workers are or how they experience their work. Watkins and Bradbard (1982) explained that parents have expressed concern about the effects that day care staff members may have on their children. Shaffer (1979) defined socialization as coming from the beliefs, behaviors, and values that are considered important by members of society. In the experiences of young children in day care socialization is developed in the daily atmosphere in which they exist. The impact of adults on children's lives is assumed but not often allowed the necessary interest to assure quality.

Staff Characteristics. An interest in whether the phenomena of burn-out and turnover occur at different rates at various levels among childcare staff in a variety of centers was the motivation for the Whitebook and Howes (1980) study. During the fall of 1978 and the winter of 1979, 95 staff people working in 32 childcare centers in San Francisco were interviewed. One-fifth of the centers in the city were represented in this study and interviews were conducted over the phone, after working hours. This interview schedule developed after many of the staff members offered to participate in the study only if they could be assured that their superiors would not have access to their responses. Interviews consisted of scaled and open-ended items. Scaled items obtained information about the following topics: training, experience, education of staff, job responsibilities, wages, hours of paid and unpaid work, benefits, career structure, adult to child ratio, break and substitute policy, frequency of meetings and topics discussed, as well as decision making policies in the centers. Open-ended questions sought to identify sources of tension and satisfaction, frequency and reasons for turnover, and changes staff would like to see in their centers. Information about center budgets and sources of funding was solicited separately from center administrators.

Participants in this study were evenly divided: one-third were head teachers or directors, one-third were teachers, and one-third were aides or assistant teachers. All of the subjects spent considerable time with children. There was a high level of education, almost 75 percent of these subjects had a Bachelor's degree. The level of experience, was that almost 75 percent had been in the field for three years or more. Even though the workers were highly educated and lived in an urban California community the salaries these subjects reported placed them in the lower ten percent of adult wage earners. The source of staff tensions, one of the main reasons for this study, was found in repeated stories of unclear or unfair job title distinctions. Aides felt that they did as much curriculum planning as teachers. Whitebook and Howes (1980) found that job titles appear to give little information about the types of tasks performed by staff members in different positions.

The nature of the work was a major source of job gratification. Direct work with children was what pleased the subjects about their job. Low wages and unpaid hours were the main sources of tension. Maintenance was frequently mentioned as a distasteful aspect of childcare work by these subjects. Perhaps, as Whitebook and Howes speculated this reflects a conflict with expectations for people with relatively high levels of education. After earning a college degree they did not expect to be working at a job that would involve cleaning, washing dishes, and preparing food.

A limitation of this study is that Whitebook and Howes (1980) tried to include many aspects of the professional satisfaction of the staff in their study. They developed conclusions that were intended to be far reaching. They did clearly define the various levels of the personnel in childcare centers. However, having subjects who comprised 20 percent of the metropolitan childcare population in one city would make it difficult to generate such widespread conclusions.

This study confirmed the commonly held assumption that childcare staff were underpaid and overworked. Burn-out was less an intrinsic element of the childcare worker's personality as Freudenberger (1977) maintained, but more a function of the context in which the work was performed. Suggestions were made about reassessing a center's existing organization with the hope that the effect would be to energize the staff and improve work relations. People then could see the origins of problems outside their own personal inadequacies.

In another study Hostetler and Klugman (1982) developed two survey instruments for their study of early childhood personnel. One instrument was used for individual National Association for the Education of Young

Children (NAEYC) members. The other instrument was used by licensed early childhood programs. It should be noted that these investigators constructed survey instruments especially for their study. A limitation of this study is that caution should be maintained in exercising wide application of results made from an especially designed instrument. However, these authors did use the instrument with different groups of subjects. One group had membership in a specific professional organization and the instruments were used in different geographical locations.

The individual questionnaires sought demographic information, suggestions for priority activities, preferred nomenclature for people working within children's programs, and perceived skills needed at each level for working with children. The questionnaires for the centers included general program information about staff turnover, salary and fringe benefits. Also included in the centers' questionnaires was an examination of staff training requirements, preferred nomenclature for people working with children and perceived skills needed for each level of children's programs. The perceived skill level section on both forms of the survey instrument used a modified version of the _Dictionary of Occupational Titles_ skill level terminology. Sections on preferred terminology were identical in both versions of the instrument. The authors of this study emphasized the importance of a self analysis of early childhood personnel to discover who they are, what they do, and nomenclature-or what they call themselves professionally.

Survey instruments for both populations were distributed in five states. In Illinois and Massachusetts a 10 percent random sample of the early childhood populations mentioned above was used. In the other states, Rhode Island, Maine, and Vermont, a 20 percent random sample was used. The response rate was higher than anticipated. A total of 196 individual responses and 153 center replies were received from the five states. The majority of respondents were between the ages of 18 and 40. However 35 percent were over age 35. Replies indicated that 42 percent of the respondents had earned a Bachelor's degree, and 42 percent had an advanced degree. Thirty four percent of the subjects had been at their current job between three and five years. Seventeen percent had been there for ten years or more. Regular in-service education was thought to be the responsibility of the agency by 96 percent of the respondents. Responses indicated that only a small group planned to change fields in the next few years.

The AEYC members were asked in one section of the survey to select from a list of professional descriptors those that they saw as referring to the same professional group as their own. An analysis of the responses indicated that place of work was more a determinant of professional group than type of work, skills and training, or commonality of interest. Hostetler and Klugman hoped to initiate the development of commonly accepted professional nomenclature. The responses indicated that early childhood identification was preferred by a substantial number of respondents. Examples of this were the words "early childhood" being used with the titles of program director, teacher or aide in preference to just using the title of director, teacher or aide. The authors believed that the Dictionary of Occupational Titles should be reviewed and updated. The current titles and task descriptors were not reflective of the responsibilities of those in the field of early childhood education.

CDA Studies. An inquiry conducted by Pettygrove (1981) was concerned with investigating whether the CDA system delivered qualified people and once they were identified, did these people experience work related benefits which support their continued good performance on the job. Field study data compared 90 CDAs who had received the credential prior to December 1977, with 80 noncredentialed childcare staff. The Credential Award System had been in operation for eighteen months when the subjects for this investigation were selected. The inquiry was conducted to analyze the accuracy of CDA assessment and the credential's role in career development. In this study trained interviewers contacted each subject twice over a two year period. The first year the subjects took a lengthly written test based on the context of the CDA competencies, were interviewed and were rated by their job supervisors. The second year subjects were again interviewed and the focus was on the subjects' attitudes about their work as a profession as well as their work environment.

The results of the discussions with the subjects described a career in which many intrinsic and symbolic rewards compensated for a lack of concrete or extrinsic compensations. Pettygrove found that most benefits and the absence thereof were felt both by credentialed and noncredentialed childcare staff. Pay increases or promotions were not experienced with any greater frequency by credentialed subjects than by those who were not credentialed. These findings suggested that employers of credentialed subjects continued to use pay scales based solely on educational level. Alternatively the absence of change in pay levels may have reflected the generally depressed financial situation of childcare.

Another study, one conducted by Peters (1982), also indicated intrinsic rather than extrinsic rewards for childcare staff. The subjects in this study were all enrolled in child development training classes. The 81 CDA trainees who participated in this evaluation were employed by Head Start either as teachers or teacher aides. A comparison group for the study was composed of 31 college seniors. All of the subjects, both the CDA trainees and the college students were enrolled in the Introductory Skills Program, courses which were included in the Development/Child Service Program at Pennsylvania State University. The study was conducted during the 1981-82 academic year and subjects were asked to complete a battery of measures in October, as a pretest and again in May, as a posttest. Both the pretest and the posttest included the Teacher Belief Inventory, the Dogmatism Scale, the Tennessee Self-Concept Scale and Background Information Questionnaire. The posttest also included the Pennsylvania State CDA Training Trainee Questionnaire. The results showed that the CDA trainees who had taken the classes in the Introductory Skills Program and participated in this study were successful when assessed for the CDA Credential. However, a followup shortly after assessment disclosed that less than 5 percent received a promotion in employment or an increase in pay. Comments by the trainees in response to open ended questions revealed self perceived changes which included confidence and a feeling of security when using new methods of interacting with the children. Again, as in the Pettygrove study, the rewards appeared to be more intrinsic than extrinsic.

It must be remembered that generalizations were made very soon after the subjects in this study had received the CDA Credential. The promotions and increases in salary that had not been realized by the staff who had recently completed CDA assessment might have taken much longer to become a reality. The fact that extrinsic rewards had not been experienced shortly after competency had improved and been recognized does not mean that they would not be realized after an appropriate time for evaluation had taken place.

Head Start Staff. Harkless (1974) conducted a study of the trainees in the Head Start Supplementary Training (HSST) Program at Wayne State University. The aim of his study was to determine the impact of training on the trainees' lives. The subjects in this study represented preschools and day care centers from the Head Start programs administered by the Detroit Public Schools and Wayne County. A profile analysis form was mailed to 168 trainees who had participated in the HSST program. Responses were given by 43 percent of those who were contacted. A semi-structured taped interview was developed and administered to 8 of these respondents. This was an attempt to investigate the motivational patterns and persistence in goal attainment. The findings of this study indicated that participants achieved a degree of economic stability. They found their earning capacity increased each year of employment and there was an opportunity for upward mobility within the program. Respondents liked having the opportunity to attend classes in colleges of their own choice and complete academic goals. Thirty two students had received certificates which ranged from GED to

MSW during a five year period. Respondents in this study listed the positive effects of changes in behavior of self and other family members.

Personal Competencies. Kardon (1982) conducted a study which was concerned with one type of CDA competency and teacher educators. Early childhood teacher educators' opinions of the CDA personal capacity competencies as well as the order of importance of the competencies within the 13 functional areas were ascertained. This research included 277 educators who taught at colleges and universities which offered either Associate degrees in Early Childhood, Bachelor degrees in Early Childhood or a combination of Bachelor's degree and either an Associate degree or CDA training. This survey required completion of two tasks by each subject. These were the Teacher Profile Questionnaire which gave demographic information about the subjects and arranging the CDA teacher competency cards in order of importance. The information returned by the subjects indicated similarities among the subjects in most of the demographic data. There was agreement within the three groups of teacher educators concerning the relative importance of the thirteen functional areas of the CDA. Kardon reported that the educators in all three groups ranked the three personal capacity categories of:

1. emotionally responsive to children,
2. maintains control in a stress free environment, and

3. individualizes teacher child contacts to foster communication

as more important than at least one of the functional areas of CDA. The teacher educators in all three groups expressed a concern that competencies other than those that were defined in the thirteen functional areas be included and required for certification. Kardon reported that the results of this study may give incentives to program developers to endeavor to work out more effective assessment techniques for the personal capacity competencies.

Interpersonal Behaviors. Aveyard (1980) conducted a study to explore the interpersonal orientations and behavior of prospective early childhood and primary teachers. The premise made by Fuller and Brown (1975) which maintained that early childhood teachers were warmer, more hopeful, and more consistent than teachers of older children initiated this study. The subjects were early childhood and primary teacher students in their third year at Riverina College of Advanced Education. There were 23 early childhood and 24 primary teacher students who participated in this study. They completed the Acceptance of Others' Questionnaire and watched a videotape made by Aveyard. The videotape explained the use of the Interpersonal Responsiveness Category System and asked the subjects to classify 27 responses. The replies could have been either confirming or disconfirming. The videotapes gave examples of three different student teachers and their behavior toward students in their classrooms. Analysis of the replies revealed that the early childhood students had a greater acceptance of others and were less critical of others' interpersonal responses. Assuming that the subjects sampled in this study were representative of future teachers generally, the results supported the claim that early childhood trainees were warmer, more supportive and less critical in the interpersonal area than primary trainees.

Once again caution should be exercised in making generalizations from a study that had a limited number of subjects included in the study. The subjects in Aveyard's (1980) report were from a very specific group.

Promotion. Staff members and their promotions were an important part of the Roupp, O'Farrell, Warner, Rowe, and Freedman (1973) report. This was a study of 20 programs which represented the diversity of groups which provide childcare. Centers and systems located in diverse locations in the United States were included in this study. Table 2-3 lists the centers that participated in this study. There was a variety of sponsors including employers, unions, private corporations, federal, state and local agencies as well as parents. The total evaluation of these programs consisted of inspecting budget records,

Table 2-3

Roupp Day Care Center Study

Single Centers

Amalgamated Day Care Center, Chicago, IL
American Child Centers Inc. Woodmont Center, Nashville, TN
Avo Day Care Center, Boston, MA
Casper Day Care, Casper, WY
Central City Head Start Day Care, Salt Lake City, UT
Fifth City Pre School, Chicago, IL
Georgetown University Hospital Day Care Center, Washington, DC
Greeley Parent Child Center, Greeley, CL
Haight Asbury Children's Center, San Francisco, CA
Holland Day Care Center, Holland, MI
Syracuse University Children's Center, Syracuse, NY
Ute Indian Tribe Day Care, Fort Duchesne, UT
West 80th Street Day Care, New York, NY

Systems

Berkeley Unified School District Children's Center, Berkeley, CA
Family Day Care Career Programs, New York, NY
Mecklenburg County Dept of Social Services Day Care Centers, Charlotte, NC
Neighborhood Centers Day Care Association, Houston, TX
Northwest Rural Opportunities Child Development Centers, Pasco, WA
Rural Child Care Project, Kentucky Child Welfare Research Foundation, Inc., Lexington, KY
Springfield Day Nursery, Brightwood Center, Springfield, MA

interviewing directors, teachers, support staff, children and parents. Reports in this study included overviews, basic program, organization, and the use of resources in each center. Staff members were described as either teachers or community members (volunteers). Generally, good in-service training programs were believed to go hand-in-hand with career development opportunities. Central City Head Start Day Care Center in Salt Lake City was cited as an example of a center where paraprofessionals were given in-service training to prepare them for their jobs and then were encouraged to attempt to progress professionally. Several parents who had come to the center as classroom volunteers were offered full time work as guidance teachers when vacancies developed. This policy proved important for aiding staff career development. Most of the staff members who were interviewed revealed strong positive feelings about themselves and the work they were doing. The feeling that one could go to the professional top at this center was given support by the example of one staff member who had started as a bus driver and guidance teacher. He became a head teacher and then was chosen over several outside candidates for the position of director. In the center mentioned above staff also had moved upward and outward to other agencies and career positions in the larger Salt Lake educational and business community. Positive promotion practices and the staff members' belief that people had the ability to succeed if they were given the opportunity contributed to the success of the program here.

Quality. Staff qualifications which included early childhood education, experience in working with young children, and attendance at workshops were part of the study done by Parker (1980). Parker's findings agreed with Jones and Prescott (1978) in discovering that staff qualifications were an asset in earning quality ratings for a childcare center.

Data for the Parker study was collected by licensing counselors of the Day Care Licensing Group of Nashville, Tennessee. The Tennessee State Department of Public Welfare had developed a set of standards which provided information regarding the relative quality of day care centers. The 154 day care centers in metropolitan Nashville, Tennessee, which were licensed in 1979 was the population for this study. The instrument that was used to collect data for Parker's study was the Tennessee Department of Human Services Day Care Centers Scoring Chart. The data were collected during annual observational visits to day care centers. Consultation with the directors of the center was included.

Based on a point system, licenses were issued which demonstrated a relative level of quality. Staff qualifications figured prominently in the quality ratings that were given to each center. Other indicators of a good day care center were found. Demographic data predicted overall quality. Profit was consistently associated with lower scores given by the licensing counselors. Additional conclusions reached in this study indicated that federal money was consistently associated with higher scores and there appeared to be an optimal size for a day care center. A center that cared for between 30 and 80 children received higher ratings in general.

A study initiated by the Day Care Division of the Administration for Children, Youth and Families began in 1974. Roupp, Travers, Glantz, and Coelen (1979) stated that this was a large scale research project to investigate the costs and effects associated with variations of regulatable characteristics of center day care. The impact of alternative federal purchasing regulations on the quality and costs of federally subsidized day care was the focus of this study. Federal regulations of special interest here were caregiver/child ratio, group size and caregiver qualifications.

Publicly funded centers rather than profit making programs were included in this study. This project was composed of three phases. They were as follows:

1. July 1974-September 1975. Sites and centers were selected, the study was refined, and the study instruments were field tested.
2. September 1975-September 1976. A year long study of regulatable center characteristics and

associated child outcomes was conducted.

3. October 1976-September 1977. More rigorous tests of the effects of variables for policy making were conducted.

There were three ways that centers were included in this study. There were observations at metropolitan day care centers for three and four year olds, visits to toddler centers, and a telephone survey. The major cost effects study of center based preschool day care was conducted at 67 day care centers in Atlanta, Detroit and Seattle. A supporting study, a smaller research effort, focused on center day care for infants and toddlers. A nationwide telephone survey of 3100 randomly selected centers was made. Responses were analyzed to answer three policy questions concerning quality, cost and the impact of regulations. The telephone survey was designed to collect information about enrollment, staffing and other characteristics of the centers. This was limited primarily to preschool centers. The infant and toddler day care study consisted of on site interviews with caregiver, directors and parents. For our purposes the parts of the National Day Care Study (NDCS) which involved caregivers will be discussed.

In this study children were randomly assigned within centers to classrooms which differed systematically in level of staff educaton and staff/child ratio. Group size and caregiver experience were equally distributed across the experimental groups. In addition to observations, two standardized tests, the Preschool Inventory and the revised Peabody Picture Vocabulary Test were used to measure the impact of center characteristics on aspects of school readiness in the study of three and four year olds. The staff examined the relationship between center characteristics and changes in the test scores for the children from fall to spring.

The following information was developed through observations and record examinations in this study. In general, the typical caregiver had slightly less than two years of post secondary education, less than one year experience in other centers and slightly more than two years experience in their present center. The amount of formal education without regard to content, showed only a few scattered relationships to child and caregiver behavior. It seemed to bear no detectable relationship to test score gains. However, education and training in child related fields such as developmental psychology, day care, early childhood education or special education was associated with distinctive patterns of caregiver and child behavior and with higher gains in test score for children. Day care experience showed some effects in the three dependent domains of caregiver behavior, child behavior and test results.

The recommendation was made following this study that persons providing day care for preschool children should have participated in a specialized child related education or training program. If there was to be a requirement for such specialized training it was suggested in this study that states should make training available. The duration of previous job related experience as well as that at current center and specialized training were considered as major dimensions of job qualifications for potential impact on the classsroom process and test score gains.

The costs of operating a day care center were related to particular areas of quality. Educational attainment and previous job related experience were related to wage rates paid to classroom staff and therefore indirectly related to day care costs. Caregiver/child ratio seemed to be the strongest determinant of differences in center costs. Roupp, Travers, Glantz and Coelen (1979) stated that perhaps the most important finding of this study was that many different dependent measures converge. It was possible to find classrooms that seemed to be better or worse for children on a variety of dimensions and link these variations in quality to regulatable center characteristics.

This study appears to have thorough investigative techniques which were used to acquire the information. However, the quantity of information that was sought and the different methods seems to be almost beyond what should have been attempted.

Employment Changes. In addition to the above studies other research has looked at changes in employment of a selected group of early childhood staff. Robinson and Canaday (1977) examined the behaviors, attitudes, and personality traits of men who had chosen caregiving as an occupation. Robinson (1979) conducted a follow-up interview to study employment promotions with the same subjects who had participated in his earlier study. Twenty subjects were included in the 1979 sample. The researcher matched 20 male engineers in age and education with his childcare staff subjects. A group of 20 female caregivers was also matched with the male caregivers by day care center, age and education. Job status and professional information and the Followup Interview Schedule for Day Care Teachers (FIST) were used to obtain information from the three groups. Thus it was possible to compare the changes in employment among the men and women in day care and the male engineers.

Job turnover rates for the day care staff showed that day care was the more transient job, especially for men. None of the male caregivers reported having been promoted in their job. It was concluded that there was something unique about the men who were caring for young children. They had chosen their jobs for intrinsic, personal reasons rather than the external rewards of promotion and salary, (Robinson and Canady, 1977). The female childcare staff listed mainly intrinsic factors as mentioned in other studies as the chief cause of their staying in their present job.

Comments on Staff Studies

It has been acknowledged that the staff of a childcare center plays an important role in the development of the children who attend the center. In reviewing the studies concerned with childcare staff it became clear that the staff was concerned with becoming well informed about educating young children. They also expressed interest and concern about progressing professionally. However, the studies that have been conducted indicate that intrinsic rewards were the chief compensation that individuals who work with young children have been realized in abundant measures.

It must be noted that the interest and the need for childcare studies have resulted in the publication of most of the studies that have been completed. It appears that similarity of problems has resulted in broad generalizations sometimes being made after a study was conducted with one or both of the following limitations. Either a very small or select group of subjects participated in a study or a specifically designed instrument was used and it may have very limited use beyond a specific study.

CHAPTER THREE

Statement of the Problem and Methodology

This section describes the processes that were used in establishing the research that was undertaken in this study. A statement of the problem and the hypotheses are included. Also under discussion are the format and content of the questionnaire, the population that was used in this study and a discussion of the manner in which the data was analyzed.

Statement of the Problem

The Child Development Associate Credential was first awarded in 1975. It was developed to assure the quality of the care children receive in a group setting outside the home. This is done by assessing the performance of the caregivers. Individuals who have demonstrated competence in specified areas have been issued a Child Development Associate Credential. It is generally thought that CDA certification has an impact, not only on the children, but on those who earn the credential. The Child Development Associate (CDA) Credential is an innovation which has generated much interest and discussion. However, little research has been concerned with CDA (Pettygrove, 1980). Granger and Gleason (1981) cited the need for information concerning the impact of the credential award. There is interest in whether employment and salary reflect the value of CDA certification. An attempt was made to formally establish the consequences of the CDA Credential.

The dearth of research concerning the CDA has been cited by Zigler and Kagan (1981). They suggested an inquiry into the short and long term effects of the credential. CDA officials in the offices at both the state and national levels repeated the need for such a study (Andresen 1982, and Gleason 1982, 1983). Research has not evaluated what the CDA Credential has meant to the individuals who have received it. The literature does not review changes which have occurred in professional development for those who have earned the CDA Credential. Now that it has been eight years since the first CDA Credentials were awarded, follow-up information could be collected. Perhaps the image of CDA as "the best kept secret" as Zigler (1981) described it can be changed.

The need to document the effect of the CDA Credential is underscored by practical aspects. The CDA program is seeking greater recognition and professional acceptance since the federal government plans to cease financial support of CDA. In the Federal Register of August 23, 1982, it was stated that "economic self-sufficiency for the CDA credentialing system, independent from Federal funding, is anticipated by the end of fiscal year 1985".

The fundamental premise of this study is that earning a CDA Credential has made a positive impact upon the professional careers of the recipients. Furthermore it was postulated that the impact on the person was different depending upon their educational achievement at the time the credential was earned and the population density of the area of the State where they were professionally employed. The details of the specific hypotheses that were tested using a questionnaire directed at the CDAs who reside in Illinois are in the next section.

Hypotheses

A series of hypotheses were formulated that related to the perceived, and real, consequences of earning a CDA Credential in Illinois. The validity of these hypotheses was examined through the analysis of the responses to a comprehensive questionnaire distributed to all the CDAs. The primary hypotheses are enumerated below:

1. The majority of CDAs perceive that earning the CDA Credential has made a positive difference to them.
2. The majority of CDAs perceive that, as a result of earning the CDA Credential, their job is better.
3. The majority of CDAs perceive that, as a result of earning the CDA Credential, their salary is better.
4. The consequences of earning the CDA Credential in Illinois depend upon the educational achievement at the time the credential was earned.
5. The consequences of earning the CDA Credential in

Illinois depend upon the population density of the area in which the CDA is professionally employed.

Methodology

The data for this study were collected using a specifically designed questionnaire survey distributed to CDA recipients in Illinois. Items on the questionnaire include some that were suggested by CDA administrative personnel (Andresen and Gleason, 1982 and 1983). Discussions with individual members of the Illinois CDA Advisory Committee and conversations at a March 1983 meeting of Illinois Trainers/Advisors helped to refine the specific areas that were included in the questionnaire. As sections of the questionnaire were being developed they were sent to state and national Child Development Associate executives for their review. Suggested items were discussed with the CDA officials and led to some of the items being included in the questionnaire. A major constraint in the design of the questionnaire was the desire to limit it to a single page in order to avoid intimidating the potential respondents. The final form of the questionnaire is reproduced in Figure 3-1 although the version that was mailed had a two column format with smaller type.

Most of the items could be answered by placing a check mark in front of the reply that was appropriate for the individual respondent. Some replies required a written

THE CHILD DEVELOPMENT ASSOCIATE CREDENTIAL QUESTIONNAIRE

1. PRESENT STATUS:

EDUCATIONAL ACHIEVEMENT

____ Some High School
____ HS Diploma or GED ____ Year
____ Some College (____ Years)
____ Associate Degree ____ Year
____ Bachelor's Degree ____ Year
____ Some Graduate Work
____ Master's Degree ____ Year
____ Doctorate ____ Year

EMPLOYMENT

Salary:

$____ per hour for ____ hours per week
or
$____ per week for ____ months
or
$____ per month for ____ months

____ Full Time ____ Part Time

____ Total Years in Early Childhood Education

Position in Early Childhood Education:

____ Volunteer
____ Parent
____ Asst. Teacher/Aide
____ Teacher
____ Supervisor/Coordinator
____ Program/Center Director
____ Other-Please Describe
____

Type of Program:

____ Head Start
____ Day Care (non Head Start)
____ Nursery School (Half Day)
____ Kindergarten
____ Other-Please Describe
____

Figure 3-1

CDA Questionnaire

OTHER

Have you renewed your CDA Credential?

____ Yes ____ No

Do you plan to renew your CDA Credential?

____ Yes ____ No

Has the CDA Credential made a positive difference to you?

____ Yes ____ No

Is your present job better as a result of earning the CDA Credential?

____ Yes ____ No

Is your present salary better as a result of earning the CDA Credential?

____ Yes ____ No

Reason for earning the CDA Credential

____ Required for Job
____ Personal Reasons
____ Other-Please Describe ________________________

PLEASE RANK THE FOLLOWING IN TERMS OF HOW IMPORTANT THESE ARE FOR YOU. A RATING OF 3 MEANS VERY IMPORTANT, 2 IS MODERATELY IMPORTANT AND 1 IS NOT SO IMPORTANT.

____ Co-workers
____ Children
____ Salary
____ Other
____ Opportunity for Advancement
____ Self Satisfaction
____ Parents

2. BEFORE CDA:

EDUCATIONAL ACHIEVEMENT

____ Some High School
____ HS Diploma or GED ____ Year
____ Some College (____ Years)
____ Associate Degree ____ Year
____ Bachelor's Degree ____ Year
____ Some Graduate Work
____ Master's Degree ____ Year
____ Doctorate ____ Year

Figure 3-1 (continued)

EMPLOYMENT

Salary:

$____ per hour for ____ hours per week
or
$____ per week for ____ months
or
$____ per month for ____ months

____ Full Time

____ Part Time

Position in Early Childhood Education:

____ Volunteer
____ Parent
____ Asst. Teacher/Aide
____ Teacher

____ Supervisor/Coordinator
____ Program/Center Director
____ Other-Please Describe
____

Type of Program:

____ Head Start
____ Day Care (non Head Start)
____ Nursery School (Half Day)

____ Kindergarten
____ Other-Please Describe
____

3. DURING CDA ASSESSMENT:

EARLY CHILDHOOD TRAINING

____ Formal Courses
Institution ____________

____ Other Training-
Describe ____________

Advisor was

____ a Volunteer
____ Paid by Employer
____ Paid by Self

Assessment Fees

____ Paid by Employer
____ Paid by Self

______ Year CDA Received

____ Age when CDA was earned

Figure 3-1 (concluded)

response often numerical in character. Three phases of the subject's career were explored by the questionnaire. The phases are as follows:

1. Present Status

   In this section inquiries were made about present educational achievement and employment. Information about present salary, position, and type of program in which the CDA was employed were requested. Other questions in this section concern credential renewal, differences that have resulted from having the credential and the motivation the individual had for earning the credential. Individuals were asked to rank, in their order of importance, different components of the early childhood program and report their total experience in early childhood education.

2. Before CDA

   In this section inquiries were made about the educational achievement and employment the respondent had prior to earning the CDA Credential. The categories of education, employment including salary, position and type of program were listed as they were in the previous section.

3. During CDA Assessment

   In this section inquiries were made about the type of training for assessment, whether formal courses were taken or other training was used to prepare for assessment. If formal training was indicated as the method used by the respondent the name of the educational institution was requested. There was another section for information about whether the advisor was a volunteer and details of the assessment fees. What year the CDA Credential was received and the age of the respondent at that time was asked near the end of the questionnaire.

Considerable detail was requested in terms of educational achievement in order to allow "years of formal education" to be used as a continuous variable for purposes of calculating correlation coefficients. Although non high school graduates were assumed to average 11 years of formal education and those with some graduate study were assumed to average 16.5 years of formal education more accuracy was required for respondents reporting some college study. The formal education was calculated as 12 plus the actual number of years of college study reported. High School Diploma, Associate Degree, Bachelor's Degree, and Master's Degree were entered as 12, 14, 16 and 17 years of formal education respectively.

It was anticipated that early childhood caregivers would have a diverse variety of pay schedules and work weeks. The questionnaire allowed responses to the salary question in terms of rates per hour, per week and per month as well as hours per week and months per year. Hourly salaries were compared independently from the number of hours worked per week. Monthly salaries may depend upon the length of the work week. The respondents were therefore asked to indicate whether their employment was full time or part time and only the full time responses were used for purposes of comparison. Weekly salaries were multiplied by 4 1/3 and merged with the monthly salary data.

Depending upon the administrative structure of their particular childcare center respondents were given the opportunity to indicate multiple position titles. Comparisons are made using only the highest title reported in the following hierarchy:

Program/Center Director
Supervisor/Coordinator
Teacher
Assistant Teacher/Aide
Parent
Volunteer

One element in the design of this study related to examining any differences that might have been characteristic of the urban environment in which the CDAs are employed. Illinois has a dominant population center in the Chicago area. This is termed a Standard Consolidated Statistical Area (SCSA) and includes portions of three states. The Illinois portion of this SCSA is totally defined by the Illinois counties of Cook, Du Page, Kane, Lake, McHenry and Will. Illinois also includes all or part of nine Standard Metropolitan Statistical Areas (SMSAs). These SMSAs, and the Illinois counties included in them, are listed below:

- Bloomington-Normal
    - McLean county
- Champaign-Urbana-Rantoul
    - Champaign county
- Davenport-Rock Island-Moline (SMSA includes a portion of Illinois)
    - Henry county
    - Rock Island county
- Decatur
    - Macon county
- Kankakee
    - Kankakee county
- Peoria
    - Peoria county
    - Tazewell county
    - Woodford county
- Rockford
    - Boone county
    - Winnebago county
- St. Louis (SMSA includes a portion of Illinois)
    - Clinton county
    - Madison county
    - Monroe county

St. Clair county

Springfield

Menard county

Sangamon county

A third characteristic area in the state is defined as those regions not included in the SCMA or any of these SMSAs. CDAs in the SCSA were identified as being from Chicago, CDAs from any one of the SMSAs were identified as being from a metropolitan area, and all other respondents were identified as being from a rural area.

Although confidentiality of the individual responses to the questionnaire was maintained it was possible to identify the origin of the individual responses. Each of the address labels was coded with a unique number. This provided an opportunity to analyze the geographical distribution of returns and add information on zip code, telephone area code and home town to the nearly 130 possible responses on each questionnaire. Unfortunately SCMA and SMSA boundaries do not coincide exactly to zip code or area code boundaries. However it was a relatively straightforward task to examine town names on a map of Illinois and categorize the character of the urban environment for each of the respondents. This code number would also have provided the basis for a followup mailing of the questionnaire if this response rate had been low enough to necessitate an additional mailing. Finally the respondents were promised a copy of a summary of the research findings and the code number could have been used to produce the appropriate address labels from the full list of CDA recipients.

Since the total population of CDAs who reside in Illinois is relatively small, less than 500, this inquiry into the character of their professional status did not require sampling techniques normally associated with analysis of survey data. A profile of an Illinois CDA was simply created by tabulating the responses to the various questions, calculating mean values and standard deviations for those answers that included specific numerical input. Comparisons among CDAs with differing levels of education at the time they earned the CDA Credential or who reside in Chicago, other metropolitan or rural areas was analyzed by assuming that there was no difference between two groups, the null hypothesis, and then testing the validity of this hypothesis.

Answers to the yes-no questions could be analyzed by calculating the deviate of the unit normal curve (z statistic) or chi-square. The chi-square, 2x2 or fourfold contingency table, approach was selected. Both approaches give essentially the same result for one degree of freedom but the chi-square seems to be more commonly used. Even though the expected frequencies may not require it, the Yates' correction for continuity was applied. This resulted in slightly conservative values for the smaller samples as compared to the uncorrected chi-square. For the expected cell frequencies it was not necessary to use the Fisher exact test of significance with its laborious calculations. The phi-coefficient was also calculated as an aid in interpreting the results of the chi-square. The absolute value of phi varies from 0 to 1.0 and it increases with increasing values of the chi-square for a given sample size.

Interrelationships between continuous variables were quantified by calculating the Pearson product-moment correlation coefficient. The absolute value of this coefficient varies from 0 to 1 where a value of 0 indicates the absence of a relation and the value of 1 indicates a perfect relation. The same type of data also lends itself to a linear regression analysis. The resulting straight line relationship is that which minimizes the squares of the errors. Both of these approaches were used in examining the effect of the level of educational achievement at the time the CDA Credential was earned.

Questionnaire Distribution and Return

The 426 names and addresses of individuals listed as Child Development Associates (CDAs) in Illinois on February 16, 1983, were obtained from the CDA national credentialing office. Two of the individuals included on the list were not Illinois residents. Subsequently it was found that 49 of the addresses were no longer current and the questionnaires were returned as undeliverable. Also one addressee indicated that she had not completed the CDA certification. Therefore the potential number of participants in this study was 374.

On June 9, 1983, the Child Development Associate Questionnaires were mailed. Included with each questionnaire was a cover letter which explained the intent of the study as well as the endorsement of the study on both the state and national level and a pre-addressed return envelope. A return date before the end of June was suggested and each envelope was coded in order to allow for a second mailing in the event that the initial response was inadequate. By August 1, 1983, a total of 184 (49.2 percent) completed questionnaires had been received. This was considerably in excess of the 20 to 40 percent return that had been expected and suggests relatively strong feelings on the part of the participants regarding their CDA Credential. The CDAs in the State were broken into 8 groups according to their zip code. Table 3-1 gives the response rate for each group. The rate varied from 34.1 percent in the suburban area north of Chicago to 65.1 percent in the midstate region which includes La Salle, Galesburg, Peoria, Bloomington, and Champaign. There was no obvious geographic concentration for the questionnaires that were returned as undeliverable. The distribution of returns seemed to indicate that a representative sample of the CDAs in Illinois completed and returned the Child Development Associate Questionnaire.

Table 3-1

Distribution of Returns

Zip Code Range	Number of CDAs	Percent Responding
60001 - 60150	44	34.1
60151 - 60450	46	47.8
60451 - 60620	62	46.8
60621 - 60650	49	42.9
60651 - 61300	48	43.8
61301 - 61900	43	65.1
61901 - 62500	41	58.5
62501 - 63000	41	57.1
Total	374	49.2

CHAPTER FOUR

Analysis and Discussion

This section contains a review, analysis and discussion of the responses that the participants in this study made to the items that are on the Child Development Associate Questionnaire. This questionnaire was mailed to all of the individuals listed as Child Development Associates (CDAs) living in Illinois. The CDAs who received the questionnaire were generally cooperative and made a sincere effort to complete the questionnaire. Occasionally a CDA did not respond to a specific section or question. However, all of the items received a sufficient number of responses for the purposes of this study. The questionnaire addresses the individual attitudes regarding the CDA Credential, the process of certification, and the professional status before and since certification. Most questions could be answered by placing a check in the appropriate location on the form. For some items specific information was required and in some sections multiple answers were requested. Therefore, in the various summaries in this section the total number of responses are sometimes larger or smaller than the total number of questionnaires returned and the number of responses is signified by N and explicitly shown.

Profile of a CDA

Inspection of the pattern of responses to the questionnaire allows one to outline the profile of the representative CDA in Illinois. The list provided by the national credentialing office showed that 90.6 percent of the recipients had traditionally female first names, while only 1.9 percent of them had traditionally male first names. Only 7.5 percent had initials or neuter first names. The distribution of ages at the time the CDA Credential was earned ranged from 20 to 63 as shown in Figure 4-1. The experience in early childhood ranged from 1 to 30 years as shown in Figure 4-2. Table 4-1 shows the distribution of when the participants in this study earned their CDA Credential. The 1983 entry is shown in parenthesis since it includes only the period from January 1 through February 16. Therefore the nominal Illinois CDA was 36.9 (standard deviation = 9.24) years old when she earned her credential in 1980.8 (standard deviation = 1.71). She had a total of 8.5 (standard deviation = 5.09) years of experience in early childhood education.

Position, Program and Assessment. The majority of the participants in this study were teachers in Head Start programs as shown in Tables 4-2 and 4-3. They earned the CDA Credential because it was required for the job. Although the distribution among the variety of programs remained essentially the same since certification there

```
AGE

          |-+
60-64     | | 2
          |-+-----+
55-59     |       | 8
          |-------++
50-54     |        | 9
          |--------+-----+
45-49     |              | 15
          |--------------+-------+
40-44     |                      | 23
          |----------------------+-----------------+
35-39     |                                        | 41
          |----------------------------------------+
30-34     |                                        | 41
          |-----------------+----------------------+
25-29     |                 | 18
          |--------------+--+
20-24     |              | 15
          |--------------+

               NUMBER OF RESPONSES
```

Figure 4-1

Age of CDA Recipients at Certification

```
YEARS OF
EXPERIENCE

          |--+
 > 20     |  | 3
          |+-+
19-20     || 1
          |+---+
17-18     |    | 5
          |----+---------+
15-16     |              | 15
          |-----------+--+
13-14     |           | 12
          |-----------+
11-12     |           | 12
          |-----------+---------+
 9-10     |                     | 22
          |---------------------+------+
 7- 8     |                            | 29
          |----------------------------+
 5- 6     |                            | 29
          |-------------------------+--+
 3- 4     |                         | 26
          |-----------+-------------+
 1- 2     |           | 12
          |-----------+

               NUMBER OF RESPONSES
```

Figure 4-2

CDAs' Experience in Early Childhood Education

Table 4-1

Distribution of Responses by Date of CDA Credential

Year CDA Earned	Number of Responses
1975	1
1976	3
1977	7
1978	13
1979	17
1980	14
1981	27
1982	93
1983	(3)

Table 4-2

Position in Early Childhood Education

Position	Before CDA	Present Status
Teacher	126	132
Assistant Teacher/Aide	44	24
Program/Center Director	15	15
Supervisor/Coordinator	8	19
Parent	5	5
Volunteer	3	2
Other	10	18

Table 4-3

Early Childhood Program

Early Childhood Program	Before CDA	Present Status
Head Start	141	142
Day Care-non Head Start	25	25
Nursery School-Half Day	15	12
Kindergarten	4	6
Other	4	9

seemed to be some advancement from Assistant Teacher/Aide and Teacher to Teacher and Supervisor/Coordinator.

Multiple reasons were noted for earning the CDA Credential. Sixty six persons noted Personal Reasons and 16 noted Other Reasons for earning the credential. The participants indicated personal plans for self improvement, the challenge of obtaining CDA certification and professional advancement through comments such as:

"Opportunity for advancement."

"Wanted an evaluation of my performance."

"Helped me learn about early childhood education."

"Better my education with children."

"To better myself through continuous studies."

"To check my abilities."

In the majority of cases the assessment fee was paid by the employer and if the advisor was paid he or she was also paid by the employer. It was noted that although 52 participants reported paying the assessment fee themselves only 30 participants reported that their advisor was either a volunteer or was paid by themselves. In other words although 82.2 percent of the advisor fees were paid by the employer only 71.4 percent of the assessment fees were paid by the employer.

The majority (94) of the participants reported formal training during the process of certification. The 50 participants who reported "Other Training" mentioned such mechanisms as workshops, seminars, conferences and classes.

The institutions noted as providing the formal training are shown in Table 4-4 with the number of citations made.

Values of Participants. One question asked the participants to give their ranking on a scale from 3 (high) to 1 (low) of the importance of a number of facets of their position. A tabulation of the responses is given in Table 4-5. Of dominant importance were the Children and the individual feeling of Self Satisfaction. The social environment involving Parents and Co-workers was next in importance with Salary and Opportunity for Advancement at the low end of the scale. In this case the consistency of the responses is obvious from the increasing values of the standard deviation. Table 4-6 presents a summary of the actual responses in order to emphasize the consistency of these value judgments. One may question whether the relative lack of importance of salary was indicative of a lack of concern or an acknowledgement of the realities of our society.

Educational Achievement. Table 4-7 gives the present educational achievement of participants as well as the educational achievement the respondents had before CDA certification. The mean and standard deviation were calculated assuming 11 years of formal education for the few non high school graduates and 16.5 years of formal education for the respondents who indicated "Some Graduate

Table 4-4

Institutions Providing Formal Training for CDA Recipients

Institution	Number of Citations
Blackhawk College	1
Chicago State University	1
College of Lake County	1
Danville Junior College	1
John Wood Community College	2
Governors State University	2
Highland Community College	1
Illinois Valley Community College	1
Kennedy-King College	3
Loop College	2
Marycrest College	3
National College of Education	1
Northeastern Illinois University	1
Northern Illinois University	1
Parkland Junior College	5
Rend Lake College	1
Richland Community College	1
Roosevelt University	1
Sauk Valley College	1
Shawnee Community College	4
Southern Illinois University	7
Southern Illinois University at Edwardsville	5
Spoon River College	1
State Community College of East St. Louis	2
Wabash Valley College	2
Western Illinois University	1
University of Kansas	1

Table 4-5

CDA Values

Item	Number of Responses	Mean Value	Standard Deviation
Children	175	2.96	0.270
Self Satisfaction	174	2.83	0.418
Parents	168	2.64	0.552
Co-workers	168	2.61	0.524
Salary	169	2.46	0.606
Opportunity for Advancement	166	2.33	0.725
Other	29	1.76	0.786

Table 4-6

CDA Value Ratings

Item	Rating of Three	Rating of Two	Rating of One	No Response
Children	171	1	3	9
Self Satisfaction	148	23	3	10
Parents	113	49	6	16
Co-workers	106	59	3	16
Salary	88	70	10	15
Opportunity for Advancement	80	61	25	18

Table 4-7

Educational Achievement

Level	Before CDA	Present Status
Some High School	4	1
High School Diploma or GED	21	8
Some College	72	77
Associate Degree	19	23
Bachelor's Degree	30	30
Some Graduate Work	16	18
Master's Degree	21	25
Mean Level (years)	14.16	14.51
Standard Deviation	1.93	1.81

Work". The 0.35 year increase in formal education must be attributed, at least in part, to study completed during the process of CDA certification.

Salary. Table 4-8 contains a summary of the salary data reported by the participants in this study. Respondents who reported weekly or monthly salaries and also indicated that they were employed only part time were not included in this tabulation since the questionnaire did not have sufficient detail to allow their responses to be properly weighted. Participants who indicated multiple job titles were included only in the highest category indicated. Weekly salaries were multiplied by 4.33 and included in the monthly totals. Examination of the data shows the highest salary variation occurring in the salaries of the Teachers. In fact the mean monthly salary for Teachers was significantly higher than that for Supervisor/Coordinators or Directors. This may have been a result of the fact that Supervisor/Coordinators and Directors were undoubtedly employed directly in early childhood centers and CDA Teachers could be employed by supporting organizations (e.g. community colleges).

Responses To Specific Questions. The design of the questionnaire included five questions that could be answered yes or no and related to the attitude of each individual toward the CDA program. The generally favorable

Table 4-8

Salary Data for CDA Recipients

	Director	Supervisor/ Coordinator	Teacher	Assistant Teacher/ Aide
Hourly Salary	(N=4)	(N=7)	(N=59)	(N=9)
High	$ 8.00	$ 7.26	$ 20.00	$ 5.05
Low	4.00	4.35	3.65	3.80
Mean	5.88	6.01	5.54	4.37
Standard Deviation	1.75	1.08	2.14	0.49
Hours per Week	(N=4)	(N=7)	(N=57)	(N=8)
High	40.0	40.0	60.0	40.0
Low	10.0	27.0	7.0	15.0
Mean	31.9	38.1	34.2	29.7
Standard Deviation	14.6	4.9	7.4	7.4
Monthly Salary	(N=6)	(N=6)	(N=43)	(N=6)
High	$ 2,400	$ 1,160	$ 2,825	$ 1,144
Low	764	656	600	600
Mean	1,270	907	1,670	846
Standard Deviation	617	207	771	210
Months per Year	(N=6)	(N=5)	(N=34)	(N=4)
High	12.0	10.0	12.0	12.0
Low	9.0	9.0	8.5	9.0
Mean	10.8	9.6	9.8	10.2
Standard Deviation	1.3	0.5	0.9	1.3

responses are summarized in Table 4-9. A total of 35 respondents replied that they had already renewed their CDA Credential. As can be seen in Table 4-1 only 41 of the participants had received their credential prior to 1980 and the renewals represent a significant percentage of those eligible for renewal. Some of the respondents indicated that they were unaware of the need to renew their certificate so the renewal rate may actually have been higher. More than 19 out of 20 of the respondents indicated that they did plan to renew their credential. Of the 7 who did not plan to renew their certificate all had taken some college classes and 3 had taken graduate work, 2 of whom had earned Master's degrees. They had a mean of 9.1 years experience in early childhood education, but 4 of them had been, and were at the time of completing the questionnaire part time employees. Although 6 out of the 7 believed that their present job and salary were not better as a result of earning the CDA Credential 3 of the 7 believed that it made a positive difference to them.

More than 78 percent of the participants in this study believed that the CDA Credential made a positive difference to them. Only 58.3 percent believed their present job was better and only 30.9 percent believed their present salary was better as a result of the CDA Credential. Thus it was evident that a positive attitude toward the CDA Credential depended not so much on salary as it did upon a feeling of self worth and attitude towards one's profession.

Table 4-9

Responses to Specific Questions

Question	Number of Responses	
	Yes	No
Have you renewed your CDA Credential?	35	142
Do you plan to renew your CDA Credential?	151	7
Has the CDA Credential made a positive difference to you?	141	39
Is your present job better as a result of earning the CDA Credential?	105	75
Is your present salary better as a result of earning the CDA Credential?	56	125

Discussion. This general review of the data collected from the CDAs in Illinois relates directly to the first three hypotheses listed in Chapter Three.

> Hypothesis 1: The majority of CDAs perceive that earning the CDA Credential has made a positive difference to them.

This hypothesis was clearly substantiated with 78.3 percent of the respondents having indicated agreement.

> Hypothesis 2: The majority of CDAs perceive that, as a result of earning the CDA Credential, their job is better.

This hypothesis was also substantiated with 58.3 percent of the respondents having indicated agreement, although the agreement was not as strong as the agreement for the first hypothesis.

> Hypothesis 3: The majority of CDAs perceive that, as a result of earning the CDA Credential, their salary is better.

This hypothesis was clearly not supported with 69.1 percent of the respondents having indicated disagreement.

Although this disagreement with the third hypothesis was real there was some data that suggested that CDA recipients may have been relatively well off in terms of salary within the early childhood profession. Hostetler and Klugman (1982) examined the processes necessary to allow early childhood education to move toward professionalism. They reported a random sample survey of licensed early childhood centers in five states. Inquiries regarding current salary ranges at each of the centers were included. Hostetler was gracious enough to share the data regarding the salary distributions for Directors, Teachers, Assistant Teacher and Aides in the 104 early childhood centers throughout the state of Illinois that were included in their study. The Hostetler questionnaire asked the following questions regarding salary:

> "What is the average salary range paid to your teachers? (Please convert to full-time equivalent.) (1) below $7,000 (minimum wage);
> (2) $7,000-9,999 ($3.40-5.00 per hour);
> (3) $10,000-14,999 ($5.00-7.50 per hour);
> (4) $15,000-19,999 ($7.50-10.00 per hour);
> (5) over $20.000; (6) does not apply"

Identical inquiries were posed for assistant teachers and aides. The question for directors was the same except for the exclusion of the note in parenthesis asking for a conversion to full time equivalent. Consideration of the relationship between the annual salaries and the hourly salaries clearly showed that Hostetler was considering 52 40-hour weeks as a full time equivalent. The data in this study was adjusted to correspond to Hostetler's ranges by multiplying the hourly salaries by 40 hours and then by 52 weeks. Monthly salaries were multiplied by 12 months. The comparative results are presented in Table 4-10. The

Table 4-10

Salary Distributions for Early Childhood Staff

Salary Range			Director	Teacher	Assistant Teacher	Aide
$ 0 to 6,999						
	Hostetler	Number	12	15	26	40
		Percent	13.8	15.5	38.8	67.8
	CDAs	Number	0	0	0	
		Percent	0.0	0.0	0.0	
$ 7,000 to 9,999						
	Hostetler	Number	15	49	39	19
		Percent	17.2	50.1	58.2	32.2
	CDAs	Number	3	24	11	
		Percent	30.0	24.0	73.3	
$ 10,000 to 14,999						
	Hostetler	Number	40	28	2	0
		Percent	46.0	28.9	3.0	0.0
	CDAs	Number	3	49	4	
		Percent	30.0	49.0	26.7	
$ 15,000 to 19,999						
	Hostetler	Number	16	5	0	0
		Percent	18.4	5.2	0.0	0.0
	CDAs	Number	3	5	0	
		Percent	30.0	5.0	0.0	
$ 20,000 to						
	Hostetler	Number	4	0	0	0
		Percent	4.6	0.0	0.0	0.0
	CDAs	Number	1	22	0	
		Percent	10.0	22.0	0.0	

reported salaries for CDAs as shown in Table 4-8 were consistently greater than the reported salaries paid by day care centers as shown in Table 4-10 even if one included a correction to update Hostetler's values to the 1982-83 academic year. However this could not be specifically attributed to the CDA Credential since it might have been the result of the same professional characteristics that motivated the individual to earn the CDA Credential.

Educational Characteristics of CDA Recipients

One of the two major premises behind this study was that it would be possible to distinguish differences among the CDA population in Illinois depending upon the level of the educational achievement at the time the credential was earned. The questionnaire was designed to provide information which would subdivide the respondents into eight categories. These categories, as well as the number of responses received, are given below:

4 - Some High School
21 - High School Diploma or General Educational Development Certificate
72 - Some College
19 - Associate Degree
30 - Bachelor's Degree
16 - Some Graduate Work
21 - Master's Degree
0 - Doctorate

Since there were so few persons with less than a high school diploma these responses were included with the responses of the high school graduates. Thus there are effectively six categories of educational achievement although it may be difficult to distinguish between the responses indicating "Some College" (the mean amount is 1.6 years) and the responses indicating an Associate Degree. The data from the questionnaires have been sorted according to these six categories and are discussed in the following paragraphs.

Table 4-11 summarizes the answers to the three questions related to the attitudes of the respondents to the CDA Credential. All groups, with the exception of those holding a Master's Degree at the time they earned their CDA Credential, were clearly positive that the CDA Credential had made a positive difference to them. The endorsement of the credential was less strong in terms of its effect upon their job from all groups except for those with less than an Associate Degree. Respondents with an Associate Degree or Some Graduate Work were mildly positive about the credential in this category while respondents with a Bachelor's Degree or Master's Degree were moderately negative about the credential in this category. It was generally felt that the CDA Credential did not have a positive effect on salary. The responses from those with at least a Bachelor's Degree were close to unanimous in this category. However, the respondents with High School

Table 4-11

Attitudinal Responses

Education Before CDA	Question Number					
	1		2		3	
	Yes	No	Yes	No	Yes	No
High School	22	3	22	3	14	11
Some College	63	8	46	26	29	42
Associate Degree	12	5	10	8	10	8
Bachelor's Degree	22	7	12	16	1	28
Some Graduate Work	11	5	9	7	2	14
Master's Degree	10	11	5	15	1	20

Question No. 1	Has the CDA Credential made a positive difference to you?
Question No. 2	Is your present job better as a result of earning the CDA Credential?
Question No. 3	Is your present salary better as a result of earning the CDA Credential?

or Associate Degree levels of education were mildly positive about the effect of the CDA Credential on their salary.

Chi-square and phi-coefficients were calculated for all combinations of educational levels for each of these attitudinal questions. The results for the question "Has the CDA Credential made a positive difference to you?" are given in Table 4-12. In order for there to be a significant statistical difference in the responses from any two groups the chi-square statistic has to be equal to or greater than 3.84 at the 5 percent level (6.64 at the 1 percent level or 10.83 at the 0.1 percent level). Inspection of Table 4-12 shows differences in attitude on this question only at the extremes of the educational levels. Respondents with High School or Some College background were significantly more positive than respondents with a Master's Degree.

Calculated chi-square and phi-coefficients for the question "Is your present job better as a result of earning the CDA Credential?" are given in Table 4-13. Inspection of Table 4-13 shows that the attitude of respondents with a High School background was significantly more positive than all of the other groups with the exception of those with Some Graduate Work. In fact, with the exception noted above the significance of the difference increased with increasing educational levels. A similar difference in attitude was noted between respondents with Some College

Table 4-12

Chi-Square and Phi-Coefficients:
Has the CDA Credential Made a Positive
Difference to You?

Education Before CDA	HS	SC	AD	BD	SGW	MD
High School						
Chi-square		0.07	1.02	0.63	1.24	6.99
Phi-coefficient		0.02	0.16	0.11	0.17	0.39
Some College						
Chi-square	0.07		2.29	1.76	2.68	14.30
Phi-coefficient	0.02		0.16	0.13	0.18	0.39
Associate Degree						
Chi-square	1.02	2.29		0.00	0.07	1.20
Phi-coefficient	0.16	0.16		0.01	0.05	0.18
Bachelor's Degree						
Chi-square	0.63	1.76	0.00		0.03	3.08
Phi-coefficient	0.11	0.13	0.01		0.02	0.25
Some Graduate Work						
Chi-square	1.24	2.68	0.07	0.03		0.90
Phi-coefficient	0.17	0.18	0.05	0.02		0.16
Master's Degree						
Chi-square	6.99	14.30	1.20	3.08	0.90	
Phi-coefficient	0.39	0.39	0.18	0.25	0.16	

Table 4-13

Chi-Square and Phi-Coefficients: Is Your Present Job Better as a Result of Earning the CDA Credential?

Education Before CDA	HS	SC	AD	BD	SGW	MD
High School						
Chi-square		4.06	4.21	9.82	3.75	15.84
Phi-coefficient		0.20	0.31	0.43	0.30	0.59
Some College						
Chi-square	4.06		0.14	2.85	0.08	8.07
Phi-coefficient	0.20		0.04	0.17	0.03	0.30
Associate Degree						
Chi-square	4.21	0.14		0.29	0.09	2.53
Phi-coefficient	0.31	0.04		0.08	0.05	0.26
Bachelor's Degree						
Chi-square	9.82	2.85	0.29		0.29	0.94
Phi-coefficient	0.43	0.17	0.08		0.08	0.14
Some Graduate Work						
Chi-square	3.75	0.08	0.09	0.29		2.46
Phi-coefficient	0.30	0.03	0.05	0.08		0.26
Master's Degree						
Chi-square	15.84	8.07	2.53	0.94	2.46	
Phi-coefficient	0.59	0.30	0.26	0.14	0.26	

and a Master's Degree.

Calculated chi-square and phi-coefficients for the question "Is your present salary better as a result of earning the CDA Credential?" are given in Table 4-14. Inspection of Table 4-14 shows that the attitude of respondents with a High School background was significantly more positive than those with at least a Bachelor's Degree. In addition both respondents with Some College and respondents with an Associate Degree were more positive about salary than respondents with either a Bachelor's Degree or a Master's Degree.

The relationship between years of formal education and the response to the three attitudinal questions can be seen clearly in Figures 4-3, 4-4, and 4-5. The data from the questionnaires is indicated by an asterisk and the straight line is a result of a linear regression analysis. Also shown on these graphs is a calculated value of the Pearson product-moment correlation coefficient. In all cases the correlation coefficient is greater than 0.8 which indicates a strong relationship with years of formal education. The correlation coefficient is highest for the question relating to salary. The attitudinal responses were most positive for the lower levels of education and fall off sharply as the educational level increases. This substantiated the fourth hypothesis listed in Chapter Three.

Hypothesis 4: The consequences of earning the CDA

Table 4-14

Chi-Square and Phi-Coefficients:
Is Your Present Salary Better as a Result of
Earning the CDA Credential?

Education Before CDA	HS	SC	AD	BD	SGW	MD
High School						
Chi-square		1.16	0.19	15.96	6.04	11.40
Phi-coefficient		0.11	0.07	0.54	0.38	0.50
Some College						
Chi-square	1.16		0.00	11.99	3.42	8.03
Phi-coefficient	0.11		0.00	0.35	0.20	0.30
Associate Degree						
Chi-square	0.19	0.00		9.55	2.77	6.51
Phi-coefficient	0.07	0.00		0.45	0.29	0.41
Bachelor's Degree						
Chi-square	15.96	11.99	9.55		0.29	0.25
Phi-coefficient	0.54	0.35	0.45		0.08	0.07
Some Graduate Work						
Chi-square	6.04	3.42	2.77	0.29		0.06
Phi-coefficient	0.38	0.20	0.29	0.08		0.04
Master's Degree						
Chi-square	11.40	8.03	6.51	0.25	0.06	
Phi-coefficient	0.50	0.30	0.41	0.07	0.04	

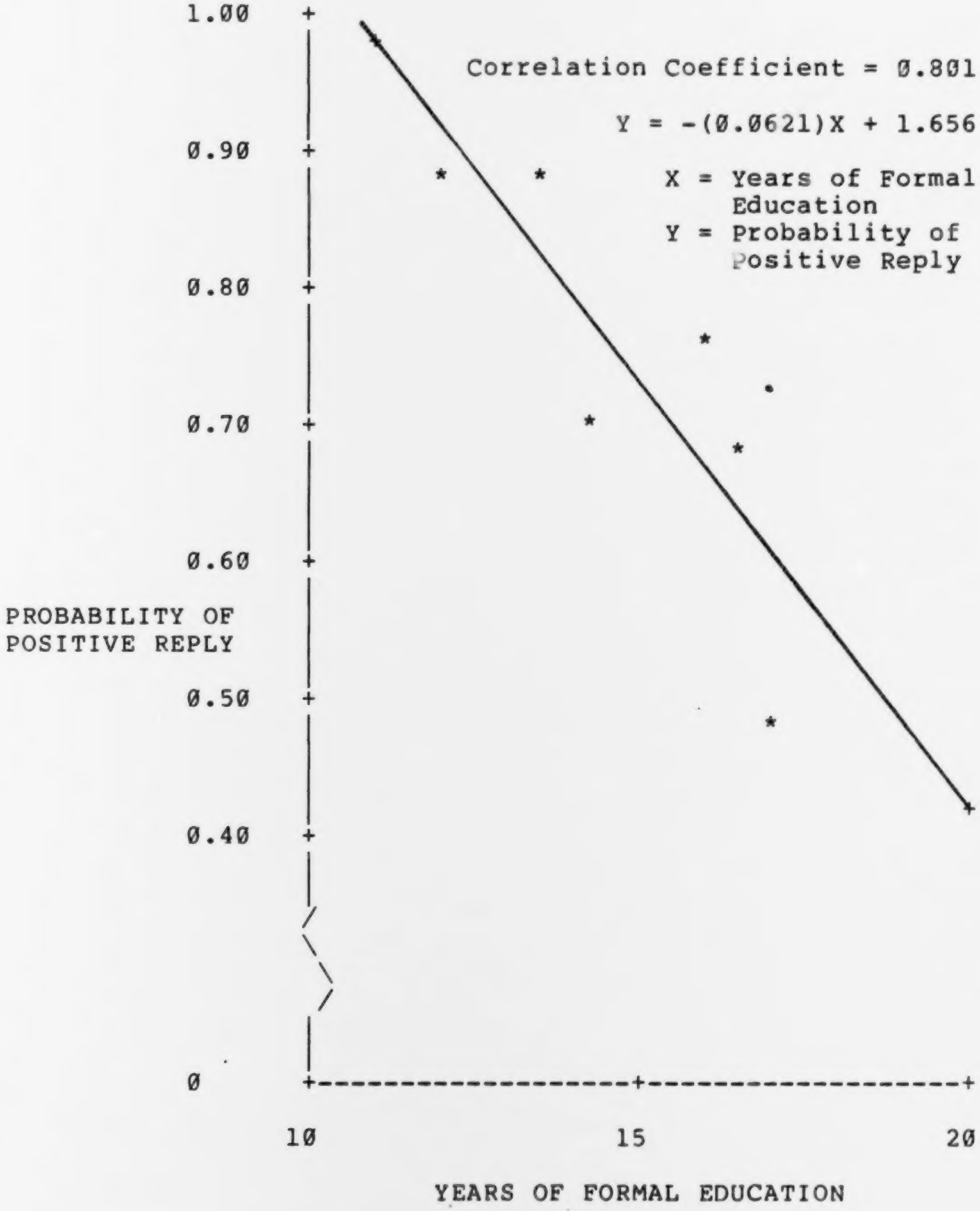

FIGURE 4-3

Linear Regression for "Has the CDA Credential made a positive difference to you?"

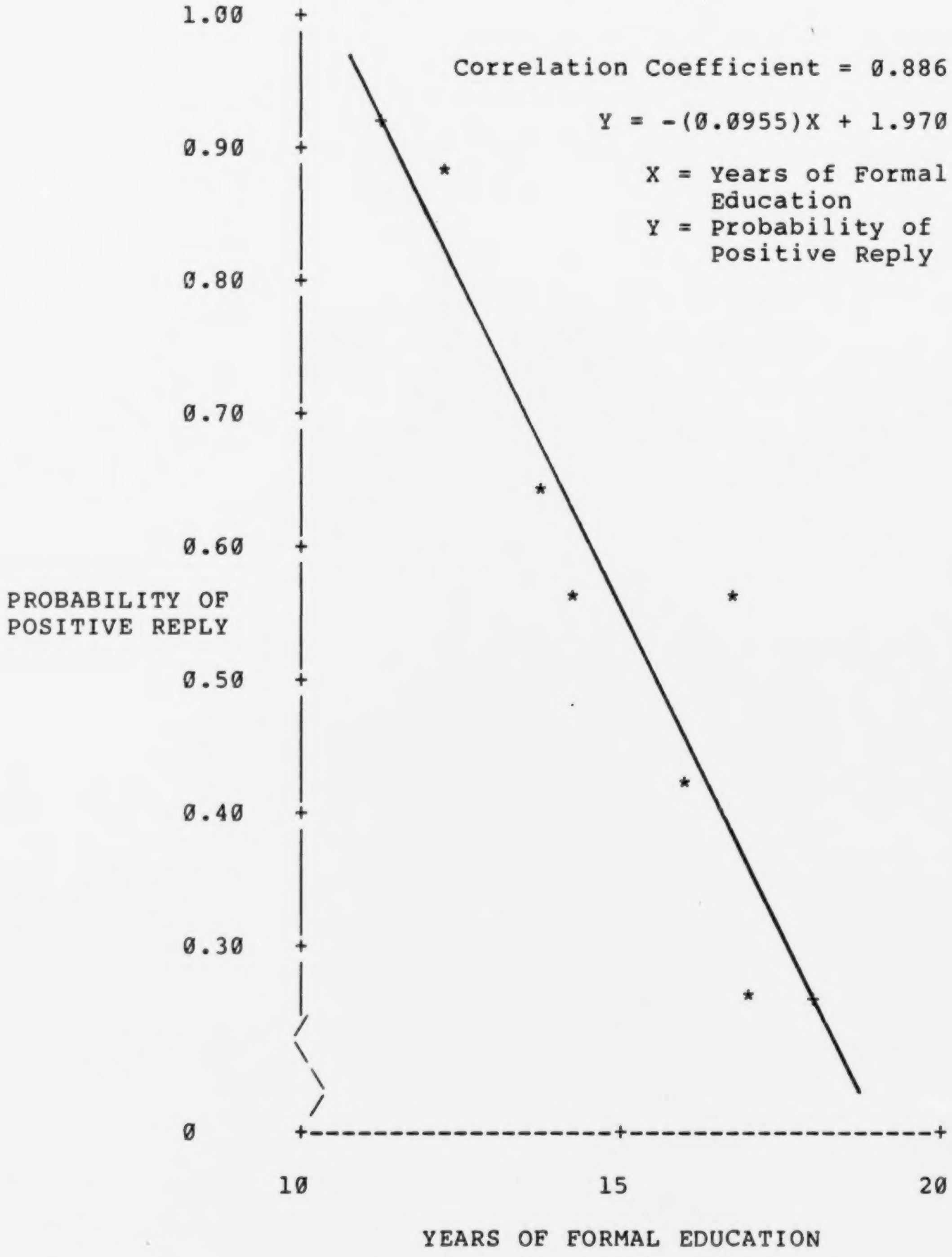

FIGURE 4-4

Linear Regression for "Is your present job better as a result of earning the CDA Credential?"

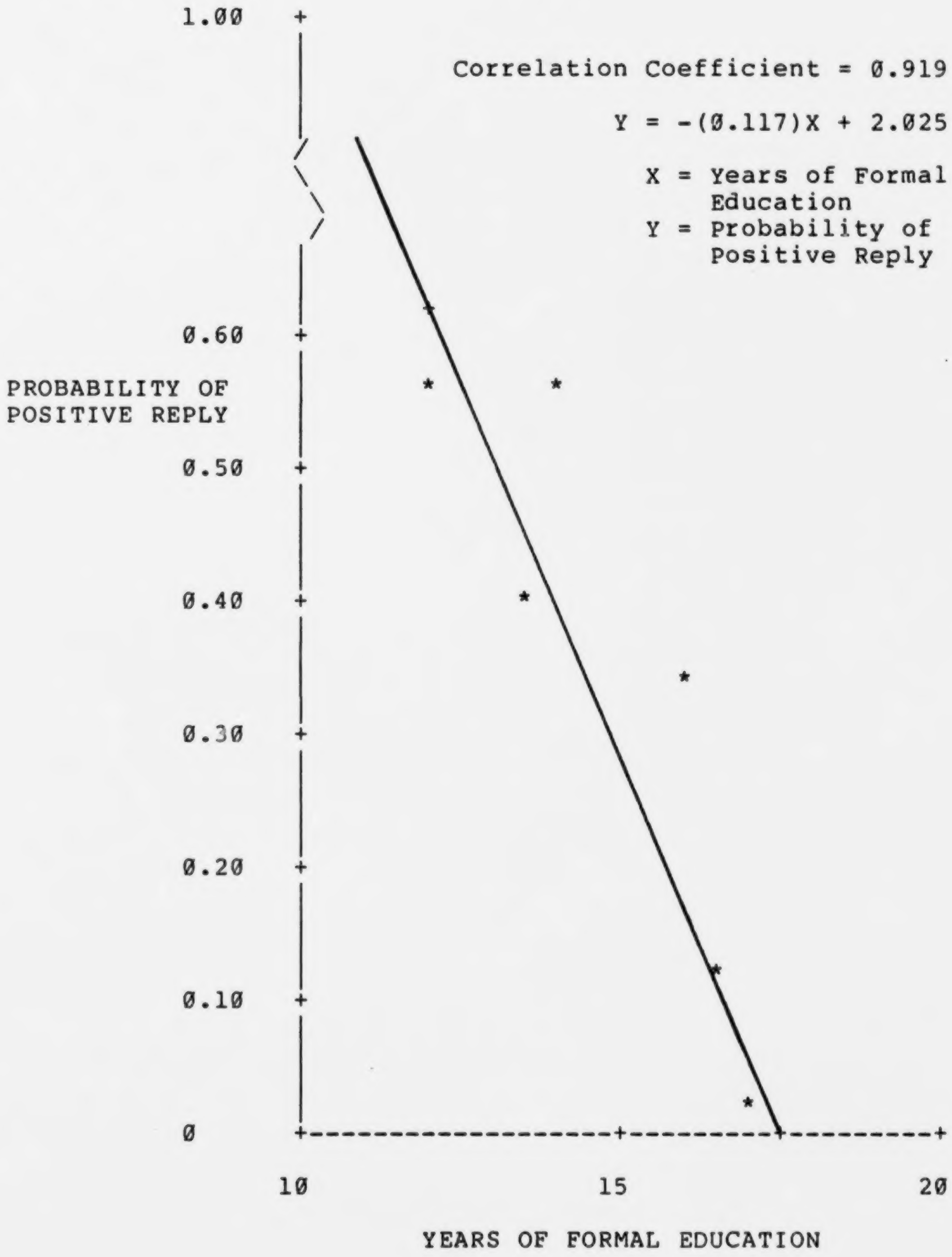

FIGURE 4-5

Linear Regression for "Is your present salary better as a result of earning the CDA Credential?"

> Credential depend upon the educational achievement at the time the credential was earned.

Evidently the perceived value of the CDA Credential decreased when a recipient had alternative educational credentials.

Urban Environment of CDA Recipients

The second major premise behind this study was that it would be possible to distinguish differences among the CDA population in Illinois depending upon the population density of the area in which the CDA is professionally employed. The addresses provided information which subdivided the respondents into three categories. These categories, as well as the number of responses received, are given below:

88 - Chicago
41 - Other Metropolitan
55 - Rural

There are, then, three categories of population density for the respondents in this study. The data from the questionnaire were sorted according to these three categories and are discussed in the following paragraphs. Table 4-15 summarizes the answers to the three questions related to the attitudes of the respondents to the CDA Credential. All groups were clearly positive that the CDA Credential had made a positive difference to them. The Chicago respondents were negative in their judgments of the

Table 4-15

Attitudinal Responses

Urban Environment	Question Number 1		2		3	
	Yes	No	Yes	No	Yes	No
Chicago	57	28	35	49	12	75
Other Metropolitan	35	6	28	13	19	21
Rural	49	5	42	13	25	29

Question No. 1	Has the CDA Credential made a positive difference to you?
Question No. 2	Is your present job better as a result of earning the CDA Credential?
Question No. 3	Is your present salary better as a result of earning the CDA Credential?

effect of the credential upon their job but respondents from Other Metropolitan and Rural areas were positive. It was generally felt that the CDA Credential did not have a positive effect on salary with responses from Chicago being strongly negative.

Chi-square and phi-coefficients were calculated for the three combinations of urban environments and the results are shown in Tables 4-16, 4-17, and 4-18. Inspection of Table 4-16 clearly shows a statistically significant difference between attitudes in Chicago and in Rural areas on whether the CDA Credential made a positive difference to the recipients. It also shows that there is no statistically significant difference between attitudes in Other Metropolitan and Rural areas. The data in Table 4-17 show that there is a statistically significant difference between attitudes in Chicago and in the other areas in Illinois on whether the CDA's job is better and also shows that there is no statistically significant difference between attitudes in Other Metropolitan and Rural areas. This same pattern is repeated in terms of perceptions of salary by the data in Table 4-18. It must be concluded that the attitudes of the CDAs in the Chicago area differed from their associates elsewhere in the state. Furthermore, there was no evidence from this questionnaire that would allow one to distinguish between the attitudes of CDAs in Other Metropolitan and Rural areas. The enthusiasm of the CDAs outside of the Chicago area was not

Table 4-16

Chi-Square and Phi-Coefficients: Has the CDA Credential Made a Positive Difference to You?

Urban Environment	Chicago	Other Metropolitan	Rural
Chicago			
Chi-square		3.82	8.96
Phi-coefficient		0.17	0.25
Other Metropolitan			
Chi-square	3.82		0.24
Phi-coefficient	0.17		0.05
Rural			
Chi-square	8.96	0.24	
Phi-coefficient	0.25	0.05	

Table 4-17

Chi-Square and Phi-Coefficients: Is Your Present Job Better as a Result of Earning the CDA Credential?

Urban Environment	Chicago	Other Metropolitan	Rural
Chicago			
Chi-square		6.78	14.80
Phi-coefficient		0.23	0.33
Other Metropolitan			
Chi-square	6.78		0.42
Phi-coefficient	0.23		0.06
Rural			
Chi-square	14.80	0.42	
Phi-coefficient	0.33	0.06	

Table 4-18

Chi-Square and Phi-Coefficients: Is Your Present Salary Better as a Result of Earning the CDA Credential?

Urban Environment	Chicago	Other Metropolitan	Rural
Chicago			
Chi-square		15.10	16.55
Phi-coefficient		0.34	0.34
Other Metropolitan			
Chi-square	15.10		0.01
Phi-coefficient	0.34		0.01
Rural			
Chi-square	16.55	0.01	
Phi-coefficient	0.34	0.01	

matched by their counterparts in the Chicago area even though the generally positive attitudes existed across the state.

These findings at least partially supported the last of the hypotheses listed in Chapter Three.

> Hypothesis 5: The consequences of earning the CDA Credential in Illinois depend upon the population density of the area in which the CDA is professionally employed.

Although no differences were found between the two groups outside the Chicago area the responses from the Chicago area clearly indicate that it has a unique character relative to the rest of the state.

List of Conclusions

1. The mean age of CDAs in Illinois was 36.9 years when the CDA Credential was earned.
2. The mean experience in early childhood education for CDAs in Illinois is 8.5 years.
3. More than three fourths of the CDAs in Illinois are employed in Head Start programs.
4. More than three fourths of the CDAs in Illinois earned the credential because it was required for their job.
5. The children and individual self satisfaction are most important for CDAs in Illinois with parents and co-workers rated second.

6. Salary and opportunity for advancement are rated last by CDAs in Illinois.
7. The mean formal education of CDAs in Illinois is 14.5 years.
8. More than 95 percent of the CDAs in Illinois plan to renew their credential.
9. More than three fourths of the CDAs in Illinois report that the credential has made a positive difference to them.
10. More than one half of the CDAs in Illinois report that their present job is better as a result of earning the credential.
11. Less than one third of the CDAs in Illinois report that their present salary is better as a result of earning the credential.
12. There are strong negative correlations between years of formal education and attitudes toward the credential in regard to individual, employment, and financial value.
13. There are statistically significant differences between the attitudes of CDAs in Chicago and those in the rest of Illinois. The CDAs outside of the Chicago area are considerably more positive about the credential than the CDAs in Chicago.
14. There are no statistically significant differences between the attitudes of CDAs in the metropolitan areas (excluding Chicago) and those in the rest of Illinois.

CHAPTER FIVE

Summary, Conclusions, and Recommendations

The fundamental premise of this study was that earning the Child Development Associate Credential had a positive impact upon the professional careers of the recipients who live in Illinois. Furthermore it was postulated that the impact on the person would be different depending upon the educational achievement at the time the credential was earned and the population density of the area of the state where the recipients were professionally employed. This chapter contains a description of the procedures, the replies of the subjects, an analysis and discussion of the responses, and recommendations for further investigations.

Procedures

The Child Development Associate (CDA) is a person trained and qualified to meet the specific needs of children in a child development setting by nurturing the children's physical, social, emotional, and intellectual growth, by establishing and maintaining a proper childcare environment and by promoting good relations between parents and staff. It was generally thought that CDA certification has an impact, not only on the children, but on the CDAs themselves.

The data for this study were collected using a specifically designed questionnaire survey distributed to CDA recipients in Illinois. The three phases of the subject's career that were explored by the questionnaire are the present status, before CDA, and during CDA assessment. Inquiries were made about the educational achievement and employment the respondent had prior to and since certification. Information was requested about salary, position, and the type of program in which the CDA is employed. Other questions concerned credential renewal, differences that resulted from having the credential, and the motivation the individual had for earning the credential. In another section respondents were asked to rank, in order of importance, different components of the early childhood program. Inquiry was also made about total years of experience in early childhood education.

One element in the design of this study related to examining any differences that were characteristic of the urban environment in which the CDAs were employed. Illinois has three distinct types of urban environments. There is a dominant population center in the Chicago area. This is termed a Standard Consolidated Statistical Area (SCSA). Illinois also includes all or part of nine Standard Metropolitan Statistical Areas (SMSAs). A third characteristic area in the state is defined as those regions not included in the SCMA or any of the SMSAs. CDAs in the SCSA were identified as being from Chicago, CDAs from any one of the SMSAs were identified as being from a metropolitan area, and all other respondents were identified as being from a rural area.

On June 9, 1983, the Child Development Associate Questionnaire was mailed. By August 1, 1983, a total of 184 completed questionnaires had been returned. This was 49.2 percent of a possible 374 respondents.

Replies

The respondents, the CDAs in Illinois, answered questions with responses which indicated a variety of backgrounds and goals. Probably as a result of the Child Development Associate Credential being a performance or competency based credential the ages and previous training of the respondents varied. A summary of the responses to all of the questions is given in Appendix A. A discussion of the replies follows.

The distribution of ages at the time the CDA Credential was earned ranged from 20 to 63. The mean age was 36.9 years which indicates that this certificate was appealing to other than the typically young person just beginning a professional career. The experience in early childhood education that the respondents reported ranged from 1 to 30 years, with the mean being 8.5 years of experience. Once again there was evidence that this certificate was not considered just a beginning point for a career. Many of the respondents had been successful childcare staff for several years before seeking certification. Comments made by the recipients indicated that a recognition of competence gave them an assurance, even though it was not a requirement for the individual.

Respondents were asked to identify their position and the type of program that they participate in professionally. The categories of position were listed as volunteer, parent, assistant teacher/aide, teacher, supervisor/coordinator, program/center director or other. The categories of type of program were listed as Head Start, day care (non Head Start), nursery school (half day), kindergarten, or other. Several respondents indicated that they had more than one position to fill at their center. The majority of the participants in this study were teachers in Head Start programs. This may have resulted from Head Start Supplemental Training combining with CDA training in 1973. Head Start has continuously demonstrated interest in upgrading the qualifications of its staff. Respondents were asked to indicate the reason for earning the CDA Credential. The motivation could have been identified as required for job, personal reasons, or other. Although the majority of respondents indicated that the CDA Credential was required for their job many respondents replied that personal reasons were part of the motivation for earning the credential.

Respondents were asked to indicate whether both the advisor and the assessment fees for CDA certification were volunteer, paid by the CDA candidate, or paid by the candidate's employer. The majority of respondents replied that the program that employed them paid the assessment fees and the advisor fee if the advisor was not a volunteer. Respondents were asked to indicate whether they participated in formal courses or other training to prepare for assessment. A majority of the respondents shared formal training. In many instances formal training was supplemented with workshops, seminars, and conferences.

One question asked the participants to rank on a scale from a high of 3 to a low of 1 the importance of a number of facets of their position. The items which were to be ranked were co-workers, children, salary, opportunity for advancement, self satisfaction, and parents. Respondents indicated that the most important part of the program, the item that was most frequently ranked as 3, was children. The importance of the other items, those ranked by importance following children were self satisfaction, parents, co-workers, salary and last of all the opportunity for advancement. Salaries are traditionally low in early childhood education. The relative lack of importance of salary, as indicated by the respondents' rankings could have been either indicative of a lack of concern or an acknowledgement of the realities of our society.

Respondents were asked to indicate what their educational achievement was at the present time and what it had been prior to earning the CDA Credential. The categories of educational achievement were listed as Some

High School, High School Diploma or the GED equivalent, Some College, Associate Degree, Bachelor's Degree, Some Graduate Work, Master's Degree, and Doctorate. None of the respondents indicated that they had earned a Doctorate. Only a few respondents did not have a high school diploma, several had a Master's degree, and the largest group had some college work before earning the CDA Certificate. The percentage breakdowns of respondents' education before CDA certification was as follows:

Educational achievement Before CDA	Percentage in This Category
Some high school	2.2
High school diploma	11.5
Some college	39.3
Associate degree	10.4
Bachelor's degree	16.4
Some graduate work	8.7
Master's degree	11.5

The educational level moved up slightly, a 0.35 year increase in formal education from the time before CDA to the present time. This increase could be attributed at least in part to study completed during the process of CDA certification.

Respondents were asked to indicate what their current salary was and what it had been prior to earning the CDA Credential. After examining the title of the position that respondents gave and considering salary data, the highest salary variation occurred in the salaries of the teachers. The mean monthly salary for teachers was significantly higher than that for those who listed the administrative title of supervisor or director. However, the salaries that were paid an administrator might have come at least in part from a source other than the childcare center.

The design of the questionnaire included five questions that could have been answered with a yes or a no and related to the attitude of each individual toward the CDA program. The responses were generally favorable. The questions concerned the following: CDA Credential renewal, intent to renew the credential, positive difference made by the CDA Credential, improvement of job and improvement of salary as a result of earning the CDA Credential. Since the credential was initially good for three years and the majority of respondents have had the credential less than that time most of them have not needed to seek renewal. When the time comes for renewal 95 percent of the respondents plan to renew. More than 78 percent of the participants in this study believed that the CDA Credential made a positive difference to them. The statements that some of the respondents wrote expressed the difference, or the positive feeling they have since certification. Some respondents mentioned that they would recommend becoming a CDA to others. The question that inquired about the job being better as a result of the CDA Credential received a positive response from 58.3 percent of the respondents.

However, 30.9 percent believed their salary was better as a result of the CDA Credential. Thus it was evident that a positive attitude toward the CDA Credential depended not so much on salary as it did upon a feeling of self worth and attitude towards one's profession.

One of the two major premises behind this study was that it would be possible to distinguish differences among the CDA population in Illinois depending upon the level of the educational achievement at the time the credential was earned. The questionnaire was designed to provide information which would subdivide the respondents into educational categories.

When looking at the responses that were given to the questions about the CDA Credential making a positive difference, being the cause for a better salary or being the cause for a better job by respondents who were grouped according to their educational level before they earned the CDA, a pattern developed. All groups, with the exception of those holding a Master's degree at the time they earned the credential were clearly positive that the CDA Credential had made a positive difference to them. The endorsement of the credential was less strong in terms of its effect upon their job from all groups except for those with less than an Associate degree. Respondents with an Associate degree or those with some graduate work were mildly positive about the credential in this category while respondents with a Bachelor's degree or a Master's degree were moderately negative about the credential in this category. It was generally felt that the CDA Credential did not have a positive effect on salary. The responses from those with at least a Bachelor's degree were close to unanimous in this category. However, the respondents with high school or Associate degree levels of education were mildly positive about the effect of the CDA Credential on their salary.

Analyses and Discussion

Chi-square and phi-coefficients were calculated for all combinations of educational levels for each of these attitudinal questions. For there to be a statistically significant difference in the responses from any two groups the chi-square statistic would have had to be equal to or greater than 3.84 at the 5 percent level. Results for the question "Has the CDA Credential made a positive difference to you?" indicated that there were significant differences. Respondents with high school or some college background were significantly more positive than respondents with a Master's degree.

Calculated chi-square and phi-coefficients for the question "Is your present job better as a result of earning the CDA Credential?" showed that the attitude of respondents with only a high school background was significantly more positive than all of the other groups with the exception of those with some graduate work. In fact, with the exception noted above the significance of the difference became greater as the years of education increased. A similar difference in attitude was noted between respondents with some college and a Master's degree.

Calculated chi-square and phi-coefficients for the question "Is your present salary better as a result of earning the CDA Credential?" showed that the attitude of respondents with only a high school background was significantly more positive than those with at least a Bachelor's degree. In addition both respondents with some college and respondents with an Associate degree were more positive about salary than respondents with either a Bachelor's degree or a Master's degree. The attitudinal responses were most positive for the lower levels of education and they dropped off sharply as the educational level increased. This substantiated one of the hypothesis of this study. The consequences of earning the CDA Credential depended upon the educational achievement at the time the credential was earned. Evidently the perceived value of the CDA Credential decreased when a recipient had alternative educational credentials.

The second major premise behind this study was that it would be possible to distinguish differences among the CDA population in Illinois depending upon the population density of the area in which the CDA was professionally employed. The addresses provided information which subdivided the respondents into three categories. These three categories, as well as the number of responses received, are as follows: 88 in Chicago, 41 in other metropolitan areas, and 55 rural. The data from the questionnaire were sorted according to these three categories. All three groups were clearly positive that the CDA Credential had made a positive difference to them. The Chicago respondents were negative in their judgments of the effect of the credential upon their job but respondents from other metropolitan and rural areas were positive. It was generally felt that the CDA Credential had not had a positive effect on salary with responses from Chicago being strongly negative.

Chi-square and phi-coefficients were calculated for the three combinations of urban environments. There was a statistically significant difference between attitudes in Chicago and in rural areas on whether the CDA Credential had made a positive difference to the recipients. There was no statistically significant difference between attitudes in other metropolitan and rural areas. There was a significant difference between attitudes in Chicago and in the other areas in Illinois on whether the CDA's job was better and there was no statistically significant difference between attitudes in other metropolitan and rural areas. This same pattern was repeated in terms of perceptions of salary. It was concluded that the attitudes of the CDAs in the Chicago area differ from their associates elsewhere in the state. Furthermore, there was no evidence from this questionnaire that would allow one to distinguish between the attitudes of CDAs in other metropolitan and rural areas. The enthusiasm of the CDAs outside the Chicago area was not matched by their counterparts in the Chicago area even though the generally positive attitudes still existed across the state. It appears that there were no differences between the two groups outside the Chicago area and that the responses from the Chicago area clearly indicated that it had a unique character relative to the rest of the state.

Recommendations

The results of this study have been extracted from a cross sectional analysis of the data. Even though the numbers would be quite small it would be of interest to perform a longitudinal analysis of the data. This would provide more insights into the effect of the credential on individual CDAs but it might be difficult to generalize the results.

The study presented here was limited to those CDAs who reside in Illinois. It would be of interest to examine the status of CDAs in Illinois compared to CDAs in other states. This could be done in several different ways. One study could compare Illinois CDA recipients to CDA recipients in another state, perhaps one without three distinct populations environments, or alternatively, a state that is similar in population characteristics to Illinois. A national sample of CDAs could also be conducted. Since there are more than 12,000 CDAs in the United States some sampling technique would have to be used to keep the data manageable. Either a national, state or a regional sample that would include several states in a region could be of interest for future study. The staff of centers within a metropolitan area could be studied. This would allow industry sponsored day care or inner city day care staff or the staff that had a specific ethnic customer to be the subjects for a study.

Future studies which continue to focus on Child Development Associates could include a more detailed analysis of various subgroups. Subjects for study could be selected from individuals who have either a specific educational level, an explicit chronological age, or a particular ethnic background. Other areas for study could include subjects who have a particular number of years either in the early childhood profession or specific number of years as a Child Development Associate. Subjects employed exclusively either in Head Start programs or programs which were totally not Head Start could also be the focus of future studies. Limitations could be defined by the investigator and particular dimensions of individual categories could be examined.

Other specialized analysis could be accomplished by doing a study of various subgroups of childcare professionals who are not Child Development Associates. They could come from a variety of populations. Possibilities include day care staff who have not had any early childhood education preparation, those who had opened a center without previous related academic coursework. Another source for the subjects for a study would be the staff of a national childcare program such as Kinder-Care. This could be a contrast to the staff of a center such as a Montessori School where the educational requirements of the staff are outlined.

If salary was to be examined in any of these surveys detailed information regarding hourly and monthly salary rates, hours per week, months worked per year and whether the employment was considered full time or part time should be collected if meaningful comparisons are to be made. It might be more valuable to compare annual incomes rather than salary rates for full time employment.

As a result of the increasing need for quality childcare staff the possibilites for future studies remain very broad. There is a hope that the children will receive care from professionals who realize the responsibilty that they have undertaken. By carefully preparing for the early childhood profession, as the Child Development Associates do, the children are given the opportunity to grow, develop, and explore in an atmosphere staffed by competent individuals.

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Appendix A

THE CHILD DEVELOPMENT ASSOCIATE CREDENTIAL QUESTIONNAIRE

TABULATION OF RESPONSES

1. PRESENT STATUS:

EDUCATIONAL ACHIEVEMENT

1	Some High School		
8	HS Diploma or GED	66.2	Year
77	Some College (1.8 Years)		
23	Associate Degree	78.4	Year
30	Bachelor's Degree	71.8	Year
18	Some Graduate Work		
25	Master's Degree	73.1	Year
0	Doctorate		Year

EMPLOYMENT

Salary:

$ 5.57 per hour for 33.5 hours per week
or
$ 315 per week for 9.4 months
or
$1,369 per month for 10.0 months

135 Full Time 26 Part Time

8.5 Total Years in Early Childhood Education

Position in Early Childhood Education:

2	Volunteer	19	Supervisor/Coordinator
5	Parent	15	Program/Center Director
24	Asst. Teacher/Aide	18	Other
132	Teacher		

Type of Program:

142	Head Start	6	Kindergarten
25	Day Care (non Head Start)	9	Other
12	Nursery School (Half Day)		

OTHER

Have you renewed your CDA Credential?

35 Yes 142 No

Do you plan to renew your CDA Credential?

151 Yes 7 No

Has the CDA Credential made a positive difference to you?

141 Yes 39 No

Is your present job better as a result of earning the CDA Credential?

105 Yes 75 No

Is your present salary better as a result of earning the CDA Credential?

56 Yes 125 No

Reason for earning the CDA Credential

139	Required for Job	16	Other
66	Personal Reasons		

PLEASE RANK THE FOLLOWING IN TERMS OF HOW IMPORTANT THESE ARE FOR YOU. A RATING OF 3 MEANS VERY IMPORTANT, 2 IS MODERATELY IMPORTANT AND 1 IS NOT SO IMPORTANT.

2.6	Co-workers	2.3	Opportunity for Advancement
3.0	Children	2.8	Self Satisfaction
2.5	Salary	2.6	Parents
1.8	Other		

2. BEFORE CDA:

EDUCATIONAL ACHIEVEMENT

4	Some High School		
21	HS Diploma or GED	66.3	Year
72	Some College (1.6 Years)		
19	Associate Degree	76.7	Year
30	Bachelor's Degree	70.8	Year
16	Some Graduate Work		
21	Master's Degree	71.2	Year
0	Doctorate		Year

EMPLOYMENT

Salary:

$ 4.72 per hour for 32.8 hours per week
or
$ 278 per week for 8.5 months
or
$1,288 per month for 10.1 months

120 Full Time 23 Part Time

Position in Early Childhood Education:

3	Volunteer	8	Supervisor/Coordinator
5	Parent	15	Program/Center Director
44	Asst. Teacher/Aide	10	Other
126	Teacher		

Type of Program:

141	Head Start	4	Kindergarten
25	Day Care (non Head Start)	4	Other
15	Nursery School (Half Day)		

3. DURING CDA ASSESSMENT:

EARLY CHILDHOOD TRAINING

94	Formal Courses	50	Other Training

Advisor was	19	a Volunteer
	139	Paid by Employer
	11	Paid by Self
Assessment Fees	130	Paid by Employer
	52	Paid by Self

80.8	Year CDA Received	36.9	Age when CDA was earned

TOTAL NUMBER OF RESPONSES: 184
12-04-1983

Appendix B

Some respondents wrote notes in addition to just answering the questions that were included on the questionnaire. The following comments were written by the respondents on their questionnaires.

1. FOR BETTER JOB

2. WAS A PARENT VOLUNTEER AND GOT INTERESTED IN IT, SO TOOK IT

3. WANTED MORE THAN JUST BEING A TEACHER'S AIDE

4. HAVE A CHANCE AT THE TEACHER'S POSITION AT THE NURSERY SCHOOL NEXT SCHOOL YEAR BECAUSE OF THE CDA

5. IT GIVES ME PRIDE AND MOTIVATION TO BETTER EDUCATE MYSELF IN EARLY CHILDHOOD FIELD - IT TELLS ME I AM SOMEBODY AND THE FAMILIES AND CO-WORKERS I AM AROUND DAILY CAN BE BETTER SERVICED

6. I HAVE HAD NO INFORMATION OR KNOWLEDGE THAT MY CDA HAD TO BE RENEWED - I WOULD APPRECIATE INFORMATION ON THIS - I FEEL THE BIGGEST PROBLEM WITH THE CDA PROGRAM IS COMPLETE LACK OF COMMUNICATION - I RECEIVED MY CDA CREDENTIALS IN 1978 - I HAVE NEVER RECEIVED ANY OF MY MATERIALS BACK WHICH WERE USED FOR MY CDA TESTING - WHEN I WRITE LETTERS FOR INFORMATION - I RECEIVE NO ANSWERS I DO NOT KNOW ANY THING ABOUT RENEWING MY CREDENTIALS AND I WOULD APPRECIATE ANY HELP YOU COULD GIVE ME

7. MY CREDENTIALS HAVE BEEN AN IMPORTANT PART IN MY JOB, BUT I FEEL THE CDA HAS FORGOTTEN ABOUT US PEOPLE OUT IN THE COUNTRY TOWNS - I HOPE THIS QUESTIONNAIRE WILL BE OF SOME HELP TO YOU

8. I ENJOY MY JOB

9. WILL RECEIVE ASSOCIATE DEGREE IN 1983

10. GENTLEMEN, IN COLUMN 1 YOU ASK IF I HAVE RENEWED MY CDA CREDENTIAL - I WAS NEVER TOLD I WOULD NEED TO RENEW IT - WILL YOU EXPLAIN PLEASE - THANK YOU

11. PRESENTLY NOT EMPLOYED - NEW BABY!

12. SUPPLEMENT TO AAS DEGREE UNTIL BACHELOR'S IS EARNED - CERTIFICATION OF QUALIFICATION SHOULD IMPROVE OR CHANGE JOB

13. REQUIRED FOR ADVANCEMENT TO TEACHER POSITION

14. I BELIEVE IN THE CHILD DEVELOPMENT ASSOCIATE

15. I ALSO WANTED CDA TO HAVE OPPORTUNITY FOR ADVANCEMENT AND ABILITIES.

16. I AM NO LONGER WORKING IN THE CHILD CARE FIELD - MY EXPERIENCE IN WORKING FOR AND RECEIVING THE CDA WAS POSITIVE IN ALL RESPECTS - I WOULD SUGGEST IT FOR ALL PERSONS WORKING WITH CHILDREN

17. IT IS AN EVALUATION OF WHAT THE INDIVIDUAL WORKER IS DOING WITH THE CHILDREN NOT WHAT SHOULD BE DOING - THANK YOU

18. AS OF AUGUST 1983 I AM OPENING MY OWN HOME DAY CARE CENTER

19. A VERY POSITIVE GOOD FEELING OF OTHERS VALUING AND SEEING THE DEEPER LEVELS OF TRUST, AND LEARNINGS TAKING PLACE IN MY PROGRAM - THE CONSORTIUM REPRESENTATIVE WAS A VERY HIGH QUALITY PERSON - TOOK TIME AND EFFORT TO BE THOROUGH - AND WAS KNOWLEDGEABLE ABOUT EARLY EDUCATION

20. I HAD THE CREDITS REQUIRED BY THE STATE, BUT NOT A DEGREE - THE CDA GAVE ME A CERTIFICATION - I ALSO WANTED A CHANCE TO PROVE THAT WHAT I HAD LEARNED THROUGH MANY YEARS EXPERIENCE HAD VALUE IN THE SAME WAY THAT FORMAL EDUCATION DID - I EARNED MY CDA WITH NO FORMAL HELP OR TRAINING

21. CDA WAS VERY BENEFICIAL FOR ME

22. SELF-GROWTH WAS REALIZED

23. AM ALSO A PUBLIC SCHOOL COACH

24. THIS IS A PROGRAM WITH POSSIBILITIES I HOPE YOU HELP GET IT GOING

25. IT WILL MEAN 5 CENTS PER HOUR RAISE NEXT SCHOOL YEAR

26. A CDA SHOULD REPLACE A MASTERS DEGREE IN EARLY CHILDHOOD EDUCATION!

27. THE BOARD OF EDUCATION REQUIRED A CDA IN ORDER TO KEEP THE HEADSTART POSITION - I WAS NOT PLEASED WITH THE ADMINISTRATION OF THE PROGRAM